LITTLE MASTERPIECES OF AUTOBIOGRAPHY

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Little Masterpieces of Autobiography

REVISED EDITION

EDITED BY
GEORGE ILES

VOLUME I

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GENERAL INTRODUCTION

Our heroes grow upon us all our lives long. At school we read of Washington at Valley Forge, of Lincoln at Gettysburg. We soon wish to know how they lived as boys, who their fathers and mothers and playmates were. We pass to manhood and our sense of debt to these great men deepens, as we assume our duties in upholding the institutions they founded and preserved. We take up the biographies which fully recount how Washington and Lincoln came to their supreme opportunities, and grasped them with strong hands. As the years follow one another, our interest widens to embrace the life-stories not only of leaders in government, but also the chieftains of literature and other manifestations of man's genius. To the lives of Hamilton and Jefferson on our shelves we add biographies of Dickens, Poe, Walt Whitman, and others.

Biography includes not only many great books, it intimately reveals the springs of great work. And on the high plane of history a clear understanding of events depends upon our seeing how rulers and reformers, soldiers and jurists, bore themselves at home as well as under the public eye; how their courage and ambition were buttressed by family affection, by the unswerving loyalty of comrades.

Fortunately some great men have written their own lives. Of all biographies these are the best, because the most nearly true. And nobody who was anybody ever fell into dullness as he told the story of his life, and for good reasons. He had a theme of the very first interest to himself, on which, for the most part, he was the sole authority. Who but Grant could tell us how Grant felt on the eve of battle? Who but Peary could make us understand Peary's dismay when wreck threatened his ship? It is delightful to have Tennyson describe the simple observations of sea and shore which flowered in his verse; and follow the successive revisions which brought "The Raven," by Poe, and "Excelsior," by Longfellow, to their final perfection.

Every autobiography tells us more than its writer meant us to know: sometimes what we read between the lines is the best part of a story. A man's letters may often open windows into his very heart. Many of Walter H. Page's hours were occupied in dealing with highly confidential matter of world import—issues which meant more to him than life itself; his responses form a goodly part of his writings. Yet we cannot imagine him setting forth in a formal autobiography, or in history of the Great War, facts, conversations, confidences and intimate episodes, so close to his heart, so sacred to his soul.

In the four little books here offered the reader, letters form the chief part. Next in extent are passages from famous autobiographies, with here and there pages from diaries such as those in which

Longfellow mirrored his mind. The series comprises Soldiers, Actors, Poets, Statesmen, Explorers, Musicians, Authors, Scientists and Inventors. The sources laid under tribute are always mentioned, so that a reader may pass from slight acquaintance with his hero to any degree of intimacy that he desires.

sense as most gossip and most letters are made of. But it is for you to read between the lines. That's where the love lies, dear mother. I wish you were here Christmas: we should welcome you as nobody else in the world can be welcomed. But wherever you are and though all the rest have the joy of seeing you, which is denied to me, never a Christmas comes but I feel as near you as I did years and years ago when we were young. (In those years *big* fish bit in old Wiley Bancom's pond by the railroad; they must have been two inches long!)—I would give a year's growth to have the pleasure of having you here. You may be sure that every one of my children along with me will look with an added reverence toward the picture on the wall that greets me every morning, when we have our little Christmas frolics—the picture that little Katharine points to and says 'That's my grandmudder.'—The years, as they come, every one, deepen my gratitude to you, as I better and better understand the significance of life and every one adds to an affection that was never small. God bless you.

WALTER

THE AMBASSADOR WRITES TO HIS SON ABOUT SCOTLAND AND THE SCOTS

GORDON ARMS HOTEL, ELGIN, SCOTLAND.
September 6, 1913.

DEAR ARTHUR:

Your mother and Kitty[1] and I are on our way to

[1]Miss Katharine A. Page.

see Andy.[1] Had you any idea that to motor from London to Skibo means driving more than eight hundred miles? Our speedometer now shows more than seven hundred and we've another day to go—at least one hundred and thirty miles. And we haven't even had a tire accident. We're having a delightful journey—only this country yields neither vegetables nor fruits, and I have to live on oatmeal. They spell it p-o-r-r-i-d-g-e, and they call it puruge. But they beat all creation as carnivorous folk. We stayed last night at a beautiful mountain hotel at Braemar (the same town whereat Stevenson wrote "Treasure Island") and they had nine kinds of meat for dinner and eggs in three ways, and no vegetables but potatoes. But this morning we struck the same thin oatbread that you ate at Grandfather Mountain.

I've never understood the Scotch. I think they are, without doubt, the most capable race in the world—away from home. But how they came to be so and how they keep up their character and supremacy and keep breeding true needs explanation. As you come through the country, you see the most monotonous and dingy little houses and thousands of robust children, all dirtier than niggers. In the fertile parts of the country, the fields are beautifully cultivated—for Lord This-and-T'Other who lives in London and comes up here in summer to collect his rents and to shoot. The country people seem desperately poor. But

[1]Mr. Andrew Carnegie.

they don't lose their robustness. In the solid cities—the solidest you ever saw, all being of granite—such as Edinburgh and Aberdeen, where you see the prosperous class, they look the sturdiest and most independent fellows you ever saw. As they grow old they all look like blue-bellied Presbyterian elders. Scotch to the marrow—everybody and everything seem—bare knees alike on the street and in the hotel with dress coats on, bagpipes—there's no sense in these things, yet being Scotch they live forever. The first men I saw early this morning on the street in front of the hotel were two weather-beaten old chaps, with gray beards under their chins. "Gudddddd Murrrrninggggg, Andy," said one. "Gudddddd murrninggggg, Sandy," said the other; and they trudged on. They'd dethrone kings before they'd shave differently or drop their burrs and gutturals or cover their knees or cease lying about the bagpipe. And you can't get it out of the blood. Your mother[1] becomes provoked when I say these things, and I shouldn't wonder if you yourself resent them and break out quoting Burns. Now the Highlands can't support a population larger than the mountain counties of Kentucky. Now your Kentucky feud is a mere disgrace to civilization. But your Highland feud is celebrated in song and story. Every clan keeps itself together to this day by its history and by its plaid. At a turn in the road in the mountains yesterday,

[1]Mrs. Walter H. Page is the daughter of a Scotchman from Ayrshire.

there stood a statue of Rob Roy painted every stripe to life. We saw his sword and purse in Sir Walter's house at Abbotsford. The King himself wore the kilt and one of the plaids at the last court ball at Buckingham Palace, and there is a man who writes his name and is called "The Macintosh of Macintosh," and that's a prouder title than the King's. A little handful of sheep-stealing bandits got themselves immortalised and heroised, and they are now all Presbyterian elders. They got *their* church "established" in Scotland, and when the King comes to Scotland, by Jehoshaphat! he is obliged to become a Presbyterian. Yet your Kentucky feudist—poor devil—he comes too late. The Scotchman has pre-empted that particular field of glory. And all such comparisons make your mother fighting mad. . . .

Affectionately,
W. H. P.

Poking A Little Fun at the Old World

To President Wilson

American Embassy, London
[May 11, 1914.]

Dear Mr. President:

The King of Denmark (I always think of Hamlet) having come to make his royal kinsman of these Isles a visit, his royal kinsman to-night gave a state dinner at the palace whereto the Ambassadors of the eight Great Powers were, of course, invited. Now I don't know how other kings do,

but I'm willing to swear by King George for a job of this sort. The splendour of the thing is truly regal and the friendliness of it very real and human; and the company most uncommon. Of course the Ambassadors and their wives were there, the chief rulers of the Empire and men and women of distinction and most of the royal family. The dinner and the music and the plate and the decorations and the jewels and the uniforms—all these were regal; but there is a human touch about it that seems almost democratic.

All for His Majesty of Denmark, a country with fewer people and less wealth than New Jersey. This whole royal game is most interesting. Lloyd George and H. H. Asquith and John Morley were there, all in white knee breeches of silk, and swords and most gaudy coats—these that are the radicals of the Kingdom, in literature and in action. Veterans of Indian and South African wars stood on either side of every door and of every stairway, dressed as Sir Walter Raleigh dressed, like so many statues, never blinking an eye. Every person in the company is printed, in all the papers, with every title he bears. Crowds lined the streets in front of the palace to see the carriages go in and to guess who was in each. To-morrow the Diplomatic Corps calls on King Christian and to-morrow night King George commands us to attend the opera as his guests.

Whether it's the court, or the honours and the orders and all the social and imperial spoils that keep the illusion up, or whether it is the Old World

inability to change anything, you can't ever quite decide. In Defoe's time they put pots of herbs on the desks of every court in London to keep the plague off. The pots of herbs are yet put on every desk in every courtroom in London. Several centuries ago somebody tried to break into the Bank of England. A special guard was detached—a little company of soldiers—to stand watch at night. The bank has twice been moved and is now housed in a building that would stand a siege; but that guard, in the same uniform, goes on duty every night. Nothing is ever abolished, nothing ever changed. On the anniversary of King Charles's execution, his statue in Trafalgar Square is covered with flowers. Every month, too, new books appear about the mistresses of old kings—as if they, too, were of more than usual interest: I mean serious, historical books. From the King's palace to the humblest house I've been in, there are pictures of kings and queens. In every house, too (to show how nothing ever changes), the towels are folded in the same peculiar way. In every grate in the kingdom the coal fire is laid in precisely the same way. There is not a salesman in any shop on Piccadilly who does not, in the season, wear a long-tail coat. Everywhere they say a second grace at dinner—not at the end—but before the dessert, because two hundred years ago they dared not wait longer lest the parson be under the table: the grace is said to-day *before* dessert! I tried three months to persuade my "Boots" to leave off blacking the soles of my shoes und[illegible] the

instep. He simply couldn't do it. Every "Boots" in the Kingdom does it. A man of learning had an article in an afternoon paper a few weeks ago which began thus: "It is now universally conceded by the French and the Americans that the decimal system is a failure," and he went on to concoct a scheme for our money that would be more "rational" and "historical." In this hot debate about Ulster a frequent phrase used is, "Let us see if we can't find the right formula to solve the difficulty"; their whole lives are formulas. Now may not all the honours and garters and thistles and O. M.'s and K. C. B.'s and all manner of gaudy sinecures be secure, only because they can't abolish anything? My servants sit at table in a certain order, and Mrs. Page's maid wouldn't yield her precedence to a mere housemaid for any mortal consideration—any more than a royal person of a certain rank would yield to one of a lower rank.

A real democracy is as far off as doomsday. So you argue, till you remember that it is these same people who made human liberty possible—to a degree—and till you sit day after day and hear them in the House of Commons, mercilessly pounding one another. Then you are puzzled. Do they keep all these outworn things because they are incapable of changing anything, or do these outworn burdens keep them from becoming able to change anything? I daresay it works both ways. Every venerable ruin, every outworn custom, makes the King more secure; and the

King gives veneration to every ruin and keeps respect for every outworn custom.

Praise God for the Atlantic Ocean! It is the geographical foundation of our liberties. Yet, as I've often written, there are men here, real men, ruling men, mighty men, and a vigorous stock.

A civilisation, especially an old civilisation, isn't an easy nut to crack. But I notice that the men of vision keep their thought on us. They never forget that we are 100 million strong and that we dare do new things; and they dearly love to ask questions about—Rockefeller! Our power, our adaptability, our potential wealth they never forget. They'll hold fast to our favour for reasons of prudence as well as for reasons of kinship. And, whenever we choose to assume the leadership of the world, they'll grant it—gradually—and follow loyally. They cannot become French, and they dislike the Germans. They must keep in our boat for safety as well as for comfort.

Yours heartily,
WALTER H. PAGE.

THE OUTBREAK OF THE GREAT WAR

To the President

LONDON
Sunday, August 9, 1914.

DEAR MR. PRESIDENT:

God save us! What a week it has been! Last Sunday I was down here at the cottage I have taken for the summer—an hour out of London—uneasy

because of the apparent danger and of what Sir Edward Grey had told me. During the day people began to go to the Embassy, but not in great numbers—merely to ask what they should do in case of war. The Secretary whom I had left in charge on Sunday telephoned me every few hours and laughingly told funny experiences with nervous women who came in and asked absurd questions. Of course, we all knew the grave danger that war might come, but nobody could by the wildest imagination guess at what awaited us. On Monday I was at the Embassy earlier than I think I had ever been there before and every member of the staff was already on duty. Before breakfast time the place was filled—packed like sardines. This was two days before war was declared. There was no chance to talk to individuals, such was the jam. I got on a chair and explained that I had already telegraphed to Washington—on Saturday—suggesting the sending of money and ships, and asking them to be patient. I made a speech to them several times during the day, and kept the Secretaries doing so at intervals. More than 2,000 Americans crowded into those offices (which are not large) that day. We were kept there till two o'clock in the morning. The Embassy has not been closed since.

Mr. Kent of the Bankers Trust Company in New York volunteered to form an American Citizens' Relief Committee. He and other men of experience and influence organised themselves at the Savoy Hotel. The hotel gave the use of nearly

a whole floor. They organised themselves quickly and admirably and got information about steamships and currency, etc. We began to send callers at the Embassy to this Committee for such information. The banks were all closed for four days. These men got money enough—put it up themselves and used their English banking friends for help—to relieve all cases of actual want of cash that came to them. Tuesday the crowd at the Embassy was still great but smaller. The big space at the Savoy Hotel gave them room to talk to one another and to get relief for immediate needs. By that time I had accepted the volunteer services of five or six men to help us explain to the people—and they have all worked manfully day and night. We now have an orderly organisation at four places: The Embassy, the Consul-General's Office, the Savoy, and the American Society in London, and everything is going well. Those two first days, there was, of course, great confusion. Crazy men and weeping women were imploring and cursing and demanding—God knows it was bedlam turned loose. I have been called a man of the greatest genius for an emergency by some, by others a damned fool, by others every epithet between these extremes. Men shook English banknotes in my face and demanded United States money and swore our government and its agents ought all to be shot. Women expected me to hand them steamship tickets home. When some found out that they could not get tickets on the transports (which they assumed would sail the

next day) they accused me of favouritism. These absurd experiences will give you a hint of the panic. But now it has worked out all right, thanks to the Savoy Committee and other helpers.

Meantime, of course, our telegrams and mail increased almost as much as our callers. I have filled the place with stenographers, I have got the Savoy people to answer certain classes of letters, and we have caught up. My own time and the time of two of the Secretaries has been almost wholly taken with governmental problems: hundreds of questions have come in from every quarter that were never asked before. But even with them we have now practically caught up—it has been a wonderful week!

SOME DRAMATIC MOMENTS

Then the Austrian Ambassador came to give up his Embassy—to have me take over his business. Every detail was arranged. The next morning I called on him to assume charge and to say good-bye, when he told me that he was not yet going! That was a stroke of genius by Sir Edward Grey, who informed him that Austria had not given England cause for war. That *may* work out, or it may not. Pray Heaven it may! Poor Mensdorff, the Austrian Ambassador, does not know where he is. He is practically shut up in his guarded Embassy, weeping and waiting the decree of fate.

Then came the declaration of war, most dramatically. Tuesday night, five minutes after the ultimatum had expired, the Admiralty telegraphed to

the fleet "Go." In a few minutes the answer came back "Off." Soldiers began to march through the city going to the railway stations. An indescribable crowd so blocked the streets about the Admiralty, the War Office, and the Foreign Office, that at one o'clock in the morning I had to drive in my car by other streets to get home.

The next day the German Embassy was turned over to me. I went to see the German Ambassador at three o'clock in the afternoon. He came down in his pajamas, a crazy man. I feared he might literally go mad. He is of the anti-war party and he had done his best and utterly failed. This interview was one of the most pathetic experiences of my life. The poor man had not slept for several nights. Then came the crowds of frightened Germans, afraid that they would be arrested. They besieged the German Embassy and our Embassy. I put one of our naval officers in the German Embassy, put the United States seal on the door to protect it, and we began business there, too. Our naval officer has moved in—sleeps there. He has an assistant, a stenographer, a messenger: and I gave him the German automobile and chauffeur and two English servants that were left there. He has the job well in hand now, under my and Laughlin's supervision. But this has brought still another new lot of diplomatic and governmental problems—a lot of them. Three enormous German banks in London have, of course, been closed. Their managers pray for my aid. Howling women come and say their innocent German

husbands have been arrested as spies. English, Germans, Americans—everybody has daughters and wives and invalid grandmothers alone in Germany. In God's name, they ask, what can I do for them? Here come stacks of letters sent under the impression that I can send them to Germany. But the German business is already well in hand, and I think that that will take little of my own time and will give little trouble. I shall send a report about it in detail to the Department the very first day I can find time to write it. In spite of the effort of the English Government to remain at peace with Austria, I fear I shall yet have the Austrian Embassy too. But I can attend to it.

Now, however, comes the financial job of wisely using the $300,000 which I shall have to-morrow. I am using Mr. Chandler Anderson as counsel, of course. I have appointed a Committee—Skinner, the Consul-General, Lieut.-Commander McCrary of our Navy, Kent of the Bankers Trust Company, New York, and one other man yet to be chosen—to advise, after investigation, about every proposed expenditure. Anderson has been at work all day to-day drawing up proper forms, etc., to fit the Department's very excellent instructions. I have the feeling that more of that money may be wisely spent in helping to get people off the continent (except in France, where they seem admirably to be managing it, under Herrick) than is immediately needed in England. All this merely to show you the diversity and multiplicity of the job.

I am having a card catalogue, each containing a sort of who's who, of all Americans in Europe of whom we hear. This will be ready by the time the *Tennessee*[1] comes. Fifty or more stranded Americans—men and women—are doing this work free.

I have a member of Congress[2] in the general reception room of the Embassy answering people's questions—three other volunteers as well.

We had a world of confusion for two or three days. But all this work is now well organised and it can be continued without confusion or cross purposes. I meet committees and lay plans and read and write telegrams from the time I wake till I go to bed. But since it is now all in order, it is easy. Of course I am running up the expenses of the Embassy—there is no help for that; but the bill will be really exceedingly small because of the volunteer work—for awhile. I have not and shall not consider the expense of whatever it seems absolutely necessary to do—of other things I shall always consider the expense most critically. Everybody is working with everybody else in the finest possible spirit. I have made out a sort of military order to the Embassy staff, detailing one man with clerks for each night and forbidding the others to stay there till midnight. None of us slept more than a few hours last week. It was not the work that kept them after the first night or two,

[1]The American Government, on the outbreak of war, sent the U. S. S. *Tennessee* to Europe, with large supplies of gold for the relief of stranded Americans.

[2]The late Augustus P. Gardner, of Massachusetts.

but the sheer excitement of this awful cataclysm. All London has been awake for a week. Soldiers are marching day and night; immense throngs block the streets about the government offices. But they are all very orderly. Every day Germans are arrested on suspicion; and several of them have committed suicide. Yesterday one poor American woman yielded to the excitement and cut her throat. I find it hard to get about much. People stop me on the street, follow me to luncheon, grab me as I come out of any committee meeting—to know my opinion of this or that—how can they get home? Will such-and-such a boat fly the American flag? Why did I take the German Embassy? I have to fight my way about and rush to an automobile. I have had to buy me a second one to keep up the racket. Buy?—no—only bargain for it, for I have not any money. But everybody is considerate, and that makes no matter for the moment. This little cottage in an out-of-the-way place, twenty-five miles from London, where I am trying to write and sleep, has been found by people to-day, who come in automobiles to know how they may reach their sick kinspeople in Germany. I have not had a bath for three days: as soon as I got in the tub, the telephone rang an "urgent" call!

Upon my word, if one could forget the awful tragedy, all this experience would be worth a lifetime of commonplace. One surprise follows another so rapidly that one loses all sense of time: it seems an age since last Sunday.

I shall never forget Sir Edward Grey's telling me of the ultimatum—while he wept; nor the poor German Ambassador who has lost in his high game—almost a demented man; nor the King as he declaimed at me for half-an-hour and threw up his hands and said, "My God, Mr. Page, what else could we do?" Nor the Austrian Ambassador's wringing his hands and weeping and crying out, "My dear Colleague, my dear Colleague."

CRANKS LEND HUMOUR TO A TRAGIC SITUATION

Along with all this tragedy come two reverend American peace delegates who got out of Germany by the skin of their teeth and complain that they lost all the clothes they had except what they had on. "Don't complain," said I, "but thank God you saved your skins." Everybody has forgotten what war means—forgotten that folks get hurt. But they are coming around to it now. A United States Senator telegraphs me: "Send my wife and daughter home on the first ship." Ladies and gentlemen filled the steerage of that ship—not a bunk left; and his wife and daughter are found three days later sitting in a swell hotel waiting for me to bring them stateroom tickets on a silver tray! One of my young fellows in the Embassy rushes into my office saying that a man from Boston, with letters of introduction from Senators and Governors and Secretaries, et al., was demanding tickets of admission to a picture gallery, and a secretary to escort him there.

"What shall I do with him?"

"Put his proposal to a vote of the 200 Americans in the room and see them draw and quarter him."

I have not yet heard what happened. A woman writes me four pages to prove how dearly she loves my sister and invites me to her hotel—five miles away—"please to tell her about the sailing of the steamships." Six American preachers pass a resolution unanimously "urging our Ambassador to telegraph our beloved, peace-loving President to stop this awful war"; and they come with simple solemnity to present their resolution. Lord save us, what a world!

And this awful tragedy moves on to—what? We do not know what is really happening, so strict is the censorship. But it seems inevitable to me that Germany will be beaten, that the horrid period of alliances and armaments will not come again, that England will gain even more of the earth's surface, that Russia may next play the menace; that all Europe (as much as survives) will be bankrupt; that relatively we shall be immensely stronger financially and politically—there must surely come many great changes—very many, yet undreamed of. Be ready; for you will be called on to compose this huge quarrel. I thank Heaven for many things—first, the Atlantic Ocean; second, that you refrained from war in Mexico; third, that we kept our treaty—the canal tolls victory, I mean. Now, when all this half of the world will suffer the unspeakable brutalisation of war, we

shall preserve our moral strength, our political powers, and our ideals.

God save us!

W. H. P.

WRITTEN IN A MOMENT OF EXASPERATION

To Arthur W. Page

LONDON,
June 6, 1915.

DEAR ARTHUR:

. . . We're in danger of being feminised and fad-ridden—grapejuice (God knows water's good enough: why grapejuice?); pensions; Christian Science; peace cranks; efficiency-correspondence schools; aid-your-memory; women's clubs; co-this and co-t'other and coddling in general; Billy Sunday; petticoats where breeches ought to be and breeches where petticoats ought to be; white livers and soft heads and milk-and-water;—I don't want war: nobody knows its horrors or its degradations or its cost. But to get rid of hyphenated degenerates perhaps it's worth while, and to free us from 'isms and soft folk. That's the domestic view of it. As for being kicked by a sauerkraut caste—O Lord, give us backbone!

Heartily yours,
W. H. P.

From Christmas Letter, 1915, to Mr. F. N. Doubleday

But, as you know, nobody's writing anything but war books—from Kipling to Hall Caine.

Poor Kipling!—his boy's dead. I have no doubt of it. I've had all the German hospitals and prison camps searched for him in vain. These writing men and women, by the way, are as true blue and as thoroughbred as any other class. I can never forget Maurice Hewlett's brave behaviour when he thought that his flying corps son had been killed by the Germans or drowned at sea. He's no prig, but a real man. And the women are as fine as the men. . . .

To go back to books: Of course nobody can tell what effect the war will have on the writing of them, nor what sort of new writers may come up. You may be sure that everything is stirred to its profoundest depths and will be stirred still more. Some old stagers will be laid on the shelf; that's certain. What sort of new ones will come? I asked H. G. Wells this question. He has promised to think it out and tell me. He has the power to guess some things very well. I'll put that question to Conrad when I next see him.

Does anybody in the United States take the Prime Minister, Mr. Asquith, to be a great man? His wife is a brilliant woman; and she has kept a diary ever since he became Prime Minister; and he now has passed the longest single term in English history. Mr. Dent thinks he's the biggest man alive, and Dent has some mighty good instincts.

Talk about troubles! Think of poor Northcliffe. He thinks he's saved the nation from its miserable government, and the government now openly

abuses him in the House of Commons. Northcliffe puts on his brass knuckles and turns the *Times* building upside down and sets all the *Daily Mail* machine guns going, and has to go to bed to rest his nerves, while the row spreads and deepens. The Government keeps hell in the prayerbook because without it they wouldn't know what to do with Northcliffe; and Northcliffe is just as sure that he has saved England as he is sure the Duke of Wellington did.

To come back to the war. (We always do.) Since I wrote the first part of this letter, I spent an evening with a member of the Cabinet and he told me so much bad military news, which they prevent the papers from publishing or even hearing, that to-night I almost share this man's opinion that the war will last till 1918. That isn't impossible. If that happens the offer that I heard a noble old buck make to a group of ladies the other night may be accepted. This old codger is about seventy-five, ruddy and saucy yet. "My dear ladies," said he, "if the war goes on and on we shall have no young men left. A double duty will fall on the old fellows. I shall be ready, when the need comes, to take four extra wives, and I daresay there are others of my generation who are as patriotic as I am."

All of which is only my long-winded, roundabout diplomatic way of wishing you every one and every one of yours and all the folk in the office, their assigns, superiors, dependents, companions in labour—all, everyone and sundry, the happiest of

Christmases; and when you take stock of your manifold blessings, don't forget to be thankful for the Atlantic Ocean. That's the best asset of safety that we have.

Affectionately yours,
W. H. P.

Page Estimates His Own Part in Bringing America into the War

To Arthur W. Page

Brighton, England,
April 28, 1917.

Dear Arthur:

. . . Well, the British have given us a very good welcome into the war. They are not very skillful at such a task: they do not know how to say "Welcome" very vociferously. But they have said it to the very best of their ability. My speeches (which I send you, with some comment) were very well received indeed. Simple and obvious as they were, they meant a good deal of work.

I cannot conceal nor can I express my gratification that we are in the war. I shall always wonder but never find out what influence I had in driving the President over. All I know is that my letters and telegrams for nearly two years—especially for the last twelve months—have put before him every reason that anybody has expressed why we should come in—in season and out of season. And there is no new reason—only more

reason of the same old sort—why we should have come in now than there was why we should have come in a year ago. I suspect that the pressure of the press and of public opinion really became too strong for him. And, of course, the Peace-Dream blew up—was torpedoed, mined, shot, captured, and killed. I trust, too, much enlightenment will be furnished by the two Commissions now in Washington. Yet it's comical to think of the attitude of the poor old Department last September and its attitude now. But thank God for it! Every day now brings a confession of the blank idiocy of its former course and its long argument! Never mind that, so long as we are now right.

To Frank N. Doubleday

AMERICAN EMBASSY, LONDON,
May 3, 1917.

DEAR EFFENDI:

I aim this at you. It may hit a German submarine. But we've got to take our chances in these days of risk. Your letter from the tropics—a letter from you from any place is as scarce as peace!—gave me a pleasant thrill and reminder of a previous state of existence, a long way back in the past. I wonder if, on your side the ocean, you are living at the rate of a century a year, as we are here? Here in bountiful England we are living on rations. I spent a night with the King a fortnight ago, and he gave us only so much bread, one egg apiece, and—lemonade. We are

to begin bread tickets next week. All this is perfectly healthful and wholesome and as much as I ever eat. But the hard part of it is that it's necessary. We haven't more than six weeks' food supply and the submarines sunk eighty-eight ships —237,000 tons—last week. These English do not publish these harrowing facts, and nobody knows them but a few official people. And they are destroying the submarines at a most beggarly slow rate. They work far out at sea—100 to 200 miles —and it's as hard to find them as it would be to find whales. The simple truth is we are in a dangerous plight. If they could stop this submarine warfare, the war would pretty quickly be won, for the Germans are in a far worse plight for food and materials and they are getting much the worst of it on land. The war would be won this summer or autumn if the submarine could be put out of business. If it isn't, the Germans may use this success to keep their spirits up and go on till next year.

SOME PLAIN TALK TO PRESIDENT WILSON

LONDON,
May 4, 1917.

DEAR MR. PRESIDENT:

. . . It is a remarkable commentary on the insularity of the British and on our studied isolation that till Mr. Balfour went over not a member of this Government had ever met a member of our Administration! Quite half our misunderstandings were due to this. If I had the making of the

laws of the two governments, I'd have a statutory requirement that at least one visit a year by high official persons should be made either way. We should never have had a blacklist, etc., if that had been done. When I tried the quite humble task of getting Polk to come and the excuse was made that he couldn't be spared from his desk—Mr. President, I fear we haven't half enough responsible official persons in our government. I should say that no man even of Polk's rank ought to have a desk: just as well give him a millstone. Even I try not to have a desk: else I'd never get anything of importance done; for I find that talks and conferences in my office and in the government offices and wherever else I can find out things take all my waking hours. The Foreign Office here has about five high position men to every one in the State Department. God sparing me, I'm going one of these days to prepare a paper for our Foreign Affairs Committee on the Waste of Having too Few High Grade Men in the Department of State; a Plea for Five Assistant Secretaries for Every One Now Existing and for Provision for International Visits by Them.

Page's Private Opinion of Lloyd George, Balfour, and Grey

From a letter to the President, May 4, 1917

These Foreign Secretaries are not only men of much greater cultivation than their Prime Ministers but of greater moral force. But I've come to

like Lloyd George very much. He'd never deliver a lecture on Dryden, and he doesn't even play a good game of golf; but he has what both Lord Grey and Mr. Balfour lack—a touch of genius—whatever that is—not the kind that takes infinite pains, but the kind that acts as an electric light flashed in the dark. He said to me the other day that experts have nearly been the death of him. "The Government has experts, experts, experts, everywhere. In any department where things are not going well, I have found boards and committees and boards of experts. But in one department at least I've found a substitute for them. I let twenty experts go and I put in one Man, and things began to move at once. Do you know any real Men? When you hear of any, won't you let me know?"

A little while ago he dined with me, and, after dinner, I took him to a corner of the drawing room and delivered your message to him about Ireland. "God knows, I'm trying," he replied. "Tell the President that. And tell him to talk to Balfour." Presently he broke out—"Madmen, madmen—I never saw any such task," and he pointed across the room to Sir Edward Carson, his First Lord of the Admiralty—"Madmen." "But the President's right. We've got to settle it and we've got to settle it now." Carson and Jellicoe came across the room and sat down with us. "I've been telling the Ambassador, Carson, that we've got to settle the Irish question now—in spite of you."

"I'll tell you something else we've got to settle

now," said Carson. "Else it'll settle us. That's the submarines. The press and public are working up a calculated and concerted attack on Jellicoe and me, and, if they get us, they'll get you. It's an attack on the Government made on the Admiralty. Prime Minister," said this Ulster pirate whose civil war didn't come off only because the big war was begun—"Prime Minister, it may be a fierce attack. Get ready for it." Well, it has been developing ever since. But I can't for the life of me guess at the possible results of an English Parliamentary attack on a government. It's like a baseball man watching a game of cricket. He can't see when the player is out or why, or what caused it. Of course, the submarine *may* torpedo Lloyd George and his Government. It looks very like it may overturn the Admiralty, as Gallipoli did. If this public finds out the whole truth, it will demand somebody's head. But I'm only a baseball man; cricket is beyond me.

But Lloyd George will outlive the war as an active force, whatever happen to him in the meantime. He's too heavily charged with electricity to stop activity. The war has ended a good many careers that seemed to have long promise. It is ending more every day.

To Theodore Roosevelt

London, January 16, 1918.

Dear Mr. Roosevelt:

The Archbishop of York goes to the United States to make some observations of us and of our

ways and to deliver addresses—on the invitation of some one of our church organisations; a fortunate event for us and, I have ventured to tell him, for him also.

During his brief stay in our country, I wish him to make your acquaintance, and I have given him a card of introduction to you, and thus I humbly serve you both.

The Archbishop is a man and a brother, a humble, learned, earnest, companionable fellow, with most charming manners and an attractive personality, a good friend of mine, which argues much for him and (I think) implies also something in my behalf. You will enjoy him.

I am, dear Mr. Roosevelt,

Sincerely yours,

WALTER H. PAGE.

From a letter to Arthur W. Page, December 23, 1917

The Prime Minister is tired. Bonar Law in a long conference that Crosby and I had with him yesterday wearily ran all round a circle rather than hit a plain proposition with a clear decision. Mr. Balfour has kept his house from overwork a few days every recent week. I lunched with Mr. Asquith yesterday; even he seemed jaded; and Mrs. Asquith assured me that "everything is going to the devil damned fast." Some conspicuous men who have always been sober have taken to drink. The very few public dinners that are held are served with ostentatious meagreness to escape criticism. I attended one last week at which there was no

bread, no butter, no sugar served. All of which doesn't mean that the world here is going to the bad—only that it moves backward and forward by emotions; and this is normally a most unemotional race. Overwork and the loss of sons and friends—the list of the lost grows—always make an abnormal strain. The churches are fuller than ever before. So, too, are the "parlours" of the fortune-tellers. So also the theatres—in the effort to forget one's self. There are afternoon dances for young officers at home on leave: the curtains are drawn and the music is muffled. More marriages take place—blind and maimed, as well as the young fellows just going to France—than were ever celebrated in any year within men's memory. Verse-writing is rampant. I have received enough odes and sonnets celebrating the Great Republic and the Great President to fill a folio volume. Several American Y. M. C. A. workers lately turned rampant Pacifists and had to be sent home. Colonial soldiers and now and then an American sailor turn up at our Y. M. C. A. huts as full as a goat and swear after the event that they never did such a thing before. Emotions and strain everywhere!

Affectionately,
W. H. P.

To Arthur W. Page

SANDWICH, May 27, 1918

DEAR ARTHUR:

. . . I do get tired—my Lord! how tired!—

not of the work but of the confinement, of the useless things I have to spend time on, of the bad digestion that has overtaken me, of London, of the weather, of absence from you all—of the general breaking up of the world, of this mad slaughter of men. But, after all, this is the common lot now and I am grateful for a chance to do what I can. That's the true way to look at it.

. . . Worry? I don't worry about anything except the war in general and this mad world so threatened by these devil barbarians. And I have a feeling that, when we get a few thousand flying machines, we'll put an end to that, alas! with the loss of many of our brave boys. I hear the guns across the channel as I write—an unceasing boom! boom! boom! That's what takes the stuff out of me and gets my inside machinery wrong. Still, I'm gradually getting even that back to normal. Golf and the poets are fine medicine. I read Keats the other day, with entire forgetfulness of the guns. Here we have a comfortable house, our own servants (as many as we need), a beautiful calm sea, a perfect air, and for the present ideal weather. There's nobody down here but Scottish soldiers. We've struck up a pleasant acquaintance with them; and some of the fellows from the Embassy come down week-ends. Only the murderous guns keep their eternal roar.

Thanks, thanks, a thousand thanks, old man. It'll all work out right.

. . . I look at it in this way: all's well that ends well. We are now doing our duty. That's

enough. These things don't bother me, because doing our duty now is worth a million years of past errors and shortcomings.

Your mother's well and spry—very, and the best company in the world. We're having a great time.

Bully for the kids! Kiss 'em for me and Mollie too.

Affectionately,
W. H. P.

To the President

American Embassy, London,
August 1, 1918.

My dear Mr. President:

I have been struggling for a number of months against the necessity to write you this note; for my doctors now advise me to give up all work for a period—my London doctor says for six months. I have a progressive digestive trouble which does not yield to the usual treatment. It's the war, five London winters, and the unceasing labour which is now the common lot. I am ashamed to say that these have brought me to something near a breakdown. I have had Sir William Osler as well as two distinguished London physicians for several months. The digestive trouble has brought other ills in its train; and I am assured that they will yield to freedom from responsibility and complete rest for a time in a dry, warm climate and that they are not likely to yield to anything else.

I see nothing else to do then but to bow to the inevitable and to ask you to be kind enough to relieve me and to accept my resignation to take effect as soon as I can go to Washington and make a somewhat extended report on the work here, which, I hope, will be of some use to the Department; and I ought to go as soon as possible—say, in September. I cannot tell you how great my disappointment is that this request has become necessary.

If the world and its work were so organised that we could do what we should like to do, I should like a leave of absence till winter be broken and then to take up my duties here again till the war end. But that, of course, is impracticable. And it is now a better time to change Ambassadors than at any time since the war began. My five years' service has had two main phases—the difficult period of our neutrality and the far easier period since we came into the war. But when the war ends, I fear that there will be again more or less troublesome tasks arising out of commercial difficulties.

But for any reasonable period the Embassy's work fortunately can now go on perfectly well with Mr. Laughlin as Chargé—until my successor can get here. The Foreign Office like him, he is *persona grata* to all other Departments of the Government, and he has had a long experience; and he is most conscientious and capable. And the organisation is in excellent condition.

I venture to ask you to have a cable message

sent to me (to be deciphered by me alone). It will require quite a little time to pack up and to get away.

I send this, Mr. President, with more regret than I can express and only after a struggle of more than six months to avoid it.

Yours sincerely,

WALTER H. PAGE.

THOMAS ALVA EDISON

[This man of genius, who created the phonograph, was born in Milan, Ohio, February 11, 1847. Until the nineteenth century the chief servant of mankind was Fire. Thanks to investigators of whom Faraday was the chief, and to inventors of the stamp of Edison, Electricity is now doing all that fire ever did, doing it better, and performing, besides, a thousand tasks impossible to flame. Edison has enriched electric telegraphy with the quadruplex and other instruments of marvellous ingenuity, he has invented dynamos of high merit; he was a pioneer of electric traction; he has done more than any one else for the success of electricity as light. On March 5, 1904, the *Electrical World and Engineer*, of New York, gave his account of the beginnings of his incandescent lamp. By his consent, and that of the McGraw Publishing Company, the article is here reprinted.—ED.]

BEGINNING OF THE INCANDESCENT LAMP

FIRST EXPERIMENTS

MY EXPERIMENTS on carbon began in 1876, when I had the idea of making carbon wire, etc., for various electrical and chemical purposes. Even at that early time Messrs. Charles Batchelor and E. H. Johnson were with me, and we saw quite a business ahead in carbon novelties. I had familiarised myself with the properties of carbon, particularly that made from paper and Bristol board, and this led on very naturally to my work on the carbon telephone or microphonic transmitter, early in 1877. In the fall of that year I was pretty well through with studies and inventions in that line, but had several other

ideas that I wanted to work up. One of these was the subdivision of the electric light, and I began experimenting with that purpose. My records and the voluminous testimony in litigation, now happily long past, show that in the fall of 1877, about September, strips of carbonised paper were tried as an incandescent conductor suitable for use in lamps, and the work was followed up until January of 1878, when the general excitement over my invention and exhibition of the phonograph out at old Menlo Park frustrated serious or continuous work for a time in any other direction. In fact, my health gave way under the strain, and in July I broke away for a western trip as far as California.

PAPER CARBONS

Of course my mind was turning the subject over, and when I got back in August we immediately went at it again. Around October and November Batchelor made a great number of paper carbons, at least fifty, from tissue and other kinds of paper, coated over their surface with mixture of lampblack and tar, rolled them up into the fine long form of a knitting needle, and then carbonised them. These we put into circuit and brought up to incandescence in vacuo, although they would last but an hour or two. We tried a great many experiments with paper carbons, wood carbons, and some made from carbonised broom corn. What we desired at

that date, and had settled our minds upon as the only possible solution of the subdivision of the electric light, was that the lamps must have high resistance and small radiating surface. About December, 1878, I engaged as mathematician Mr. Francis R. Upton, who had lately studied under Helmholtz in Germany, and he helped me greatly in calculations of the multiple arc problem. Our figure proved that the lamp must have at least 100 ohms resistance to compete successfully with gas, for if the lamps were of the low resistance, the cost of the proper main conductors would be so great as to render the system uneconomical and commercially impracticable. In this direction we tried platinum also; and when working on incandescent platinum we had procured a Sprengel mercury pump and had ascertained that we could thus get exceedingly high vacua.

VACUOUS BULBS PERFECTED

It occurred to me that perhaps a "filament" of carbon could be made to stand in the sealed glass vessels or bulbs, which we were using, exhausted to a high vacuum. Separate lamps were made in this way independent of the air pump, and in October, 1879, we made lamps of paper carbon, and with carbons of common sewing thread, placed in a receiver or bulb made entirely of glass, with the leading in wires sealed in by fusion. The whole thing was exhausted

by the Sprengel pump to nearly one-millionth of an atmosphere. These filaments of carbon, although naturally quite fragile owing to their length and small mass, had a smaller radiating surface and higher resistance than we had dared hope. We had virtually reached the position and condition where the carbons were stable. In other words, the incandescent lamp as we still know it to-day, in essentially all its particulars unchanged, had been born.

We began immediately to make vacuum pumps and to produce these paper filament lamps on them. During that November we made perhaps as many as 100 of such lamps, and the same month saw us plunged deep in experiments and inventions on dynamos, regulators, meters, circuits, etc., all just as necessary to the success of the art as the little lamp itself. Some of those paper filament lamps had a remarkably long life. Each yielded from 12 to 16 candle-power and they were burned on chandeliers until they gave out. The average life was about 300 hours, so that commercial success and a new industry were already well in sight.

BAMBOO FILAMENTS

But I was not quite satisfied as to paper, or even with the more regular and homogeneous wood fibre filaments, and thus came to take up bamboo. We happened to have a palm-

leaf fan on one of the tables. I was then investigating everything with a microscope, so I picked it up and found that it had a rim on the outside, of bamboo, a very long strip cut from the outer edge. We soon had that cut up into blanks and carbonised. On putting these filaments into the lamps we were gratified to see that the lamps were several times better than any we had succeeded in making before. I soon ascertained why and started a man off for Japan on a bamboo hunt. Before I got through I had tested no fewer than 6,000 vegetable growths, and had ransacked the world for the most suitable bamboo. The use of bamboo was maintained for many years, until other processes dealing with such material as cellulose had been perfected. We tried even at the earliest moment of success a number of experiments and things afterward taken up again or followed through, as for example, burning the paper filaments in a vacuum charged with inert gas; and a little later, in 1880, we also "flashed" the filaments with gasolene vapour.

A CROWNING SUCCESS

The furore that followed the announcements from Menlo Park as to the successful subdivision of the electric light in a commercial incandescent lamp will be well remembered by many of the readers of this. The feasibility of such a thing had been denied by some of the greatest

minds in electricity, but here it was; and along lines that have endured to this day. The best story at the time was given to the world by the New York *Herald* in December, 1879, and on Christmas Day I had already lighted up my laboratory, my offices, two or three houses about one-fifth of a mile from the dynamo plant, and some twenty street lights. On the last day of the year some 3,000 people flocked out to Menlo Park to see it for themselves—and the rest everybody knows.

It is interesting to note that in addition to those mentioned above I had around me other men who ever since have remained active in the field, such as Messrs. Francis Jehl, W. J. Hammer, Martin Force, Ludwig Boehm, not forgetting that good friend and co-worker, the late John Kruesi. They found plenty to do in the various developments of the art, and as I now look back I sometimes wonder how we did so much in so short a time. Early in the spring of 1880 I lighted up for Mr. Villard the Oregon Steam Navigation Company's steamer *Columbia*, and it was not long before the Edison plants began to multiply. Meantime lamp making took on large proportions in two factories of mine, one at old Menlo Park and the other at Newark, and much of my energy was being devoted to cheapening the price of the lamp as well as increasing its life and its candle-power per watt. I am told that upon a moderate computation the production of incandescent lamps in this

country since my first success has reached a total of 250,000,000 lamps, or not less than 10,000,000 a year for each of the twenty-five years. Essentially, the lamp has remained structurally the same ever since 1879, in the elements then demonstrated to be essentially vital and necessary to commercial success.

JEFFERSON

"The Writings of Thomas Jefferson," in twelve volumes, are published by G. P. Putnam's Sons, New York. They were edited by the late Paul Leicester Ford, who contributed an Introduction of high critical value. He said in part:

". . . In the rebuilding of government [after the Revolution], the classes secured an influence far out of proportion to their numbers. In the state constitutions they succeeded in somewhat curtailing and limiting the popular control; and later, in the formation of our national constitution they sought still further to wrest powers from the people, both by grants, which interposed barriers to the direct delegation of power from the people to the executive, judiciary, and one of the legislative branches, and by clauses properly worded so as to leave the question of the quantity of power granted to the decision of men who would almost certainly be drawn from the classes. And a resulting political party attempted to carry this policy still further. Had government been merely a matter of intellect and ability, the Federalists would have succeeded in controlling and fixing its character in this country. That when they had done their work of construction, they were excluded from office, without ever comprehending the reason, proves how little they understood the tendency, intelligence, and power of the forces they were attempting to circumscribe. Unlike the Federalists, Jefferson was willing to discard the tradition of ages — that the people must be protected against themselves by the brains, money, and 'better elements' of the country — and for this reason American democracy made him its chosen agent and mouthpiece.

". . . Because he believed that only the people truly knew what the people needed; that those who could take care of themselves were wise and practical enough to help care for the nation; and that the only way of enforcing laws was that they should be made by those who are to obey them, he undertook, with reluctance and self-sacrifice, to be

the instrument of popular action. That he was the founder of the Democratic party is a claim little less than absurd, for there has always been, and always will be, such a party. But he united the democratic elements on certain principles and objects, and proved himself such a leader as the party has seldom been able to obtain. . . . His methods and results were not always good. His character and conduct had many serious flaws. Yet in some subtle way the people understood him, and forgave in him weaknesses and defects they have seldom condoned. And eventually this judgment will universally obtain, as the fact becomes clearer and clearer, that neither national independence nor state sovereignty, with the national and party rancours that attach to them, were the controlling aim and attempt of his life; that no party or temporary advantage was the object of his endeavours, but that he fought for the ever enduring privilege of personal freedom . . . ."

In 1821, in his seventy-seventh year, Jefferson began writing an autobiography. He carried it no further than to 1790. Its pages have been drawn upon for three of the selections here presented.

Many lives of Jefferson have appeared. Two of them may here be named: the Life by Henry S. Randall, in three volumes, published in 1858 by J. B. Lippincott, Philadelphia; and "Thomas Jefferson," by John T. Morse, Jr., a volume of the American Statesmen series, published by Houghton, Mifflin & Co., Boston and New York. — ED.]

How the Declaration of Independence Was Written

[TO JAMES MADISON]

MONTICELLO, August 30, 1823.

. . . YOU have doubtless seen Timothy Pickering's Fourth of July observations on the Declaration of Independence. If his principles and prejudices, personal and political, gave us

no reason to doubt whether he had truly quoted the information he alleges to have received from Mr. Adams, I should then say that in some of the particulars, Mr. Adams's memory has led him into unquestionable error. At the age of eighty-eight, and forty-seven years after the transactions of Independence, this is not wonderful. Nor should I, at the age of eighty, venture to oppose my memory to his, were it not supported by written notes, taken by myself at the moment and on the spot.

He says, "The committee of five, to wit, Doctor Franklin, Sherman, Livingston and ourselves, met, and discussed the subjects, and then appointed him and myself to make the draft; that we, as a sub-committee, met and conned the paper over, and he does not remember that he made or suggested a single alteration." Now these details are quite incorrect. The committee of five met; no such thing as a sub-committee was proposed, but they unanimously pressed on myself alone to undertake the draft. I consented; I drew it: but before I reported it to the committee, I communicated it separately to Dr. Franklin and Mr. Adams, requesting their corrections, because they were the two members of whose judgments and amendments I wished most to have the benefit, before presenting it to the committee; and you have seen the original paper now in your hands, with the corrections of Dr. Franklin and Mr. Adams interlined in their own hand-

writings. Their alterations were two or three only, and merely verbal.

I then wrote a fair copy, reported it to the committee, and from them, unaltered, to Congress. This personal communication and consultation with Mr. Adams, he has misremembered into the actings of a sub-committee. Pickering's observations, and Mr. Adams's in addition, "that it contained no new ideas, that it is a commonplace compilation, its sentiments hackneyed in Congress for two years before, and its essence contained in Otis's pamphlet," may all be true. Of that I am not to be the judge. Richard Henry Lee charged it as copied from Locke's Treatise on Government. Otis's pamphlet I never saw, and whether I had gathered my ideas from reading or reflection I do not know. I know only that I turned to neither book nor pamphlet in writing it. I did not consider it as any part of my charge to invent new ideas altogether, and to offer no sentiment which had ever been expressed before. Had Mr. Adams been so restrained, Congress would have lost the benefit of his bold and impressive advocations of the rights of revolution. For no man's confident and fervid addresses, more than Mr. Adams's, encouraged and supported us through the difficulties surrounding us, which, like the ceaseless action of gravity weighed on us by night and day. Yet, on the same ground, we may ask which of those elevated thoughts was new, or can be

affirmed never before to have entered the conceptions of man.

Against a Landed Aristocracy

[from the autobiography]

On October 12, 1776, I obtained leave to bring in a bill in the Virginia House of Delegates, declaring tenants of entailed estates to hold their lands in fee simple [without entail]. In the earlier times of the colony, when lands were to be obtained for little or nothing, some provident individuals procured large grants, and, desirous of founding great families for themselves, entailed them on their descendants. The transmission of this property from generation to generation in the same name raised up a distinct set of families who, being privileged by law in the perpetuation of their wealth, were thus formed into a patrician order, distinguished by the splendour and luxury of their establishments. From this order, too, the king habitually selected his Counsellors of State, the hope of which distinction devoted the whole corps to the interests and will of the crown. To annul this privilege, and instead of an aristocracy of wealth, of more harm and danger than benefit to society, to make an opening for the aristocracy of virtue and talent, which nature has wisely provided for the direction of the interests of society, and scattered with equal hand through all its conditions, was deemed essential to a well ordered

republic. To effect it no violence was necessary, no deprivation of natural right, but rather an enlargement of it by a repeal of the law. For this would authorise the present holder to divide the property among his children equally, as his affections were divided; and would place them, by natural generation on a level of their fellow citizens. . . The bill passed.

Too Much Talk in Congress

[FROM THE AUTOBIOGRAPHY]

Our body [Congress in 1783] was little numerous, but very contentious. Day after day was wasted on the most unimportant questions. My colleague, John F. Mercer, was one of those afflicted with the morbid rage of debate; of an ardent mind, prompt imagination, and copious flow of words, he heard with impatience any logic which was not his own. Sitting near me on some occasion of a trifling but wordy debate, he asked how I could sit in silence hearing so much false reasoning which a word should refute. I observed to him that to refute indeed was easy, but to silence impossible. That in measures brought forward by myself, I took the labouring oar, as was incumbent on me; but that in general I was willing to listen. If every sound argument or objection was used by some one or other of the numerous debaters, it was enough: if not, I thought it sufficient to suggest the omission, without going into a

repetition of what had already been said by others. That this was a waste and an abuse of the time and patience of the house which could not be justified. And I believe that if the members of deliberative bodies were to observe this course generally, they would do in a day what takes them a week, and it is really more questionable, than may at first be thought, whether Bonaparte's dumb legislature which said nothing and did much, may not be preferable to one which talks much and does nothing. I served with General Washington in the legislature of Virginia before the Revolution and, during it, with Dr. Franklin in Congress. I never heard either of them speak ten minutes at a time, nor to any but the main point which was to decide the question. They laid their shoulders to the great points, knowing that the little ones would follow of themselves. If the present Congress errs in too much talking, how can it be otherwise in a body to which the people send one hundred and fifty lawyers, whose trade it is to question everything, yield nothing, and talk by the hour? . . .

A Retrospect at Fifty-seven

[written in 1800]

I have sometimes asked myself, whether my country is the better for my having lived at all? I do not know that it is. I have been the instrument of doing the following things; but

they would have been done by others; some of them, perhaps, a little better:

The Rivanna had never been used for navigation; scarcely an empty canoe had ever passed down it. Soon after I came of age, I examined its obstructions, set on foot a subscription for removing them, got an Act of Assembly passed, and the thing effected, so as to be used completely and fully for carrying down all our produce.

The Declaration of Independence.

I proposed the demolition of the church establishment and the freedom of religion. It could only be done by degrees; to wit, the Act of 1776, chapter 2, exempted dissenters from contributions to the Church, and left the Church clergy to be supported by voluntary contributions of their own sect, was continued from year to year, and made perpetual 1779, chapter 36. I prepared the act for religious freedom in 1777, as part of the revisal, which was not reported to the Assembly till 1779, and that particular law not passed till 1785, and then by the efforts of Mr. Madison.

The act of putting an end to entails.

The act of prohibiting the importation of slaves.

The act concerning citizens, and establishing the natural right of man to expatriate himself at will.

The act changing the course of descents, and giving the inheritance to all the children, etc., equally, I drew as part of the revisal.

The act for apportioning crimes and punishments, part of the same work, I drew. . . .

In 1789 and 1790, I had a great number of olive plants, of the best kind, sent from Marseilles to Charleston, for South Carolina and Georgia. They were planted, and are flourishing; and, though not yet multiplied, they will be the germ of that cultivation in those States.

In 1790, I got a cask of heavy upland rice, from the river Denbigh, in Africa, about lat. 9° 30′ north, which I sent to Charleston, in hopes it might supersede the culture of the wet rice, which renders South Carolina and Georgia so pestilential through the summer. It was divided, and a part sent to Georgia. I know not whether it has been attended to in South Carolina, but it has spread in the upper parts of Georgia, so as to have become almost general, and is highly prized. Perhaps it may answer in Tennessee and Kentucky. The greatest service which can be rendered any country is to add a useful plant to its culture, especially a bread grain; next in value to bread is oil.

[Three years after he wrote these notes, Jefferson effected the purchase of a territory from France which in 1908 sustains at least twenty millions of the population of the United States.]

Regarding the Louisiana Purchase

[TO M. DUPONT DE NEMOURS, MEMBER OF THE COUNCIL OF ANCIENTS, PARIS.]

WASHINGTON, November 1, 1803.

Your favours of April the 6th and June the 27th were duly received, and with the welcome

which everything brings from you. The treaty which has so happily sealed the friendship of our two countries, has been received here with general acclamation. Some inflexible Federalists have still ventured to brave the public opinion. It will fix their character with the world and with posterity, who, not descending to the other points of difference between us, will judge them by this fact, so palpable as to speak for itself, in all times and places. For myself and my country I thank you for the aids you have given in it; and I congratulate you on having lived to give those aids in a transaction replete with blessings to unborn millions of men, and which will mark the face of a portion of the globe so extensive as that which now composes the United States of America. It is true that at this moment a little cloud hovers in the horizon. The Government of Spain has protested against the right of France to transfer; and it is possible she may refuse possession, and that this may bring on acts of force. But against such neighbours as France there, and the United States here, what she can expect from so gross a compound of folly and false faith, is not to be found in the book of wisdom. She is afraid of her enemies in Mexico. But not more than we are. Our policy will be to form New Orleans and the country on both sides of it on the Gulf of Mexico, into a state; and, as to all above that, to transplant our Indians into it, constituting them a Maréchaussée [jurisdic-

tion] to prevent emigrants crossing the river, until we shall have filled up all the vacant country on this side. This will secure both Spain and us as to the mines of Mexico, for half a century, and we may safely trust the provisions of that time to the men who shall live in it.

Aristocracies Real and Unreal

[to john adams]

Monticello, October 28, 1813.

. . . I agree with you that there is a natural aristocracy among men. The grounds of this are virtue and talents. Formerly, bodily powers gave place among the aristoi [best]. But since the invention of gun-powder has armed the weak as well as the strong with missile death, bodily strength, like beauty, good humour, politeness, and other accomplishments, have become but an auxiliary ground of distinction. There is also an artificial aristocracy, founded on wealth and birth, without either virtue or talents; for with these it would belong to the first class. The natural aristocracy I consider as the most precious gift of nature, for the instruction, the trusts, and government of society. And, indeed, it would have been inconsistent in creation to have formed man for the social state, and not to have provided virtue and wisdom enough to manage the concerns of the society. May we not even

say, that form of government is the best, which provides the most effectually for a pure selection of these natural aristoi [best] into the officers of government? The artificial aristocracy is a mischievous ingredient in government, and provision should be made to prevent its ascendancy. On the question, what is the best provision, you and I differ; but we differ as rational friends, using the free exercise of our own reason, and mutually indulging its errors. You think it best to put the pseudo-aristoi [counterfeit best] into a separate chamber of legislation, where they may be hindered from doing mischief by their coördinate branches, and where, also, they may be a protection to wealth against the Agrarian and plundering enterprises of the majority of the people. I think that to give them power in order to prevent them from doing mischief, is arming them for it, and increasing instead of remedying the evil. For if the coordinate branches can arrest their action, so may they that of the coördinates. Mischief may be done negatively as well as positively. Of this, a cabal in the Senate of the United States has furnished many proofs. Nor do I believe them necessary to protect the wealthy; because enough of these will find their way into every branch of the legislation, to protect themselves. From fifteen to twenty legislatures of our own in action for thirty years past, have proved that no fears of an equalisation of property are to be apprehended from them. I think the best

remedy is exactly that provided by our Constitutions, to leave to the citizens the free election and separation of the aristoi from the pseudo-aristoi, of the wheat from the chaff. In general, they will elect the really good and wise. In some instances, wealth may corrupt, and birth blind them; but not in sufficient degree to endanger the society.

Views on Education

[Jefferson was a life-long friend of public education. In 1819 he founded the University of Virginia at Charlottesville.]

. . . At the first session of our legislature after the Declaration of Independence, we passed a law abolishing entails. And this was followed by one abolishing the privilege of primogeniture [inheritance chiefly by eldest son] and dividing the lands of intestates [owners of property who leave no wills] equally among all their children, or other representatives. These laws, drawn by myself, laid the axe to the root of pseudo-aristocracy. . . . And had another which I had prepared been adopted by the legislature, our work would have been complete. It was a bill for the more general diffusion of learning. This proposed to divide every county into wards of five or six miles square, like your townships; to establish in every ward a free school for reading, writing, and common arithmetic; to provide for the annual selection of the best subjects from these schools, who might receive,

at the public expense, a higher degree of education at a district school; and from these district schools to select a certain number of the most promising subjects, to be completed [in education] at a university, where all the useful sciences should be taught. Worth and genius would thus have been sought out from every condition of life, and completely prepared by education for defeating the competition of wealth and birth for public trusts. My proposition had, for a further object, to impart to these wards those portions of self-government for which they are best qualified, by confiding to them the care of their poor, their roads, police, elections, the nomination of jurors, administration of justice in small cases, elementary exercises of militia; in short, to have them little republics, with a warden at the head of each, for all those concerns which, being under their eye, they would better manage than the larger republics of the county or state.

Education for the Farmer

[to david williams]

Washington, November 14, 1803.

. . . The greatest evils of populous society have ever appeared to me to spring from the vicious distribution of its members among the occupations called for. I have no doubt that those nations are essentially right, which leave this to individual choice, as a better guide to an advantageous distribution, than any other

which could be devised. But when, by a blind concourse, particular occupations are ruinously overdone, and others left in want of hands, the national authorities can do much toward restoring the equilibrium. On the revival of letters, learning became the universal favourite. And with reason, because there was not enough of it existing to manage the affairs of the nation to the best advantage. All the efforts of society, therefore, were directed to the increase of learning, and the inducements of respect, ease, and profit were held up for its encouragement. To these incitements were added the powerful fascinations of large cities. These circumstances have long since produced an overcharge in the class of competitors for learned occupation, and great distress among the supernumerary candidates; and the more, as their habits of life have disqualified them for reëntering the laborious class.

The evil cannot be suddenly, nor perhaps ever entirely cured. Doubtless there are many means which the nation might bring to bear on this subject. Public opinion and public encouragement are among these. The class principally defective is that of agriculture. It is the first in utility and ought to be the first in respect. The same artificial means which have been used to produce a competition in learning, may be equally successful in restoring agriculture to its primary dignity in the eyes of men. It is a science of the very first order. It counts among

its handmaids Chemistry, Natural Philosophy, Mechanics, Mathematics, Natural History and Botany. In every college and university, a Professorship of Agriculture, and the class of its students, might be honoured as the first, young men closing their academical education with this, as the crown of all other sciences, fascinated with its solid charms, and at a time when they are to choose an occupation, instead of crowding the other classes, would return to the farms of their fathers, their own, or that of others, and replenish and invigorate a calling, now languishing. The schools, instead of storing their pupils with a lore which the present state of society does not call for, converted into schools of agriculture, might restore them to that great calling, qualified to enrich and honour themselves, and to increase the productions of the nation instead of consuming them. . . .

An Optimist at Seventy-three

[to john adams]

Monticello, April 8, 1816.

You ask, if I would agree to live my seventy or rather seventy-three years over again? To which I say yea. I think with you that it is a good world on the whole; that it has been framed on a principle of benevolence, and more pleasure than pain dealt out to us. There are, indeed, (who might say nay) gloomy and hypochondriac minds, inhabitants of diseased bodies, disgusted

with the present, and despairing of the future; always counting that the worst will happen, because it may happen. To these I say, how much pain have cost us the evils which have never happened! My temperament is sanguine. I steer my bark with Hope in the head, leaving Fear astern. My hopes, indeed, sometimes fail; but not oftener than the forebodings of the gloomy. There are, I acknowledge, even in the happiest life, some terrible convulsions, heavy set-offs against the opposite page of the account. I have often wondered for what good end the sensations of grief could be intended. All our other passions, within proper bounds, have a useful object. And the perfection of the moral character is, not in a stoical apathy, so hypocritically vaunted, and so untruly too, because impossible, but in a just equilibrium of all the passions. I wish the pathologists then, would tell us what is the use of grief in the economy, and of what good it is the cause, proximate or remote.

On the Character of Washington

[to dr. walter jones]

Monticello, January 2, 1814.

I think I knew General Washington intimately and thoroughly; and were I called on to delineate his character, it should be in terms like these:

His mind was great and powerful, without being of the very first order; his penetration strong, though not so acute as that of a Newton,

Bacon, or Locke; and as far as he saw, no judgment was ever sounder. It was slow in operation, being little aided by invention or imagination, but sure in conclusion. Hence the common remark of his officers, of the advantage he derived from councils of war, where hearing all suggestions, he selected whatever was best; and certainly no general ever planned his battles more judiciously. But if deranged during the course of the action, if any member of his plan was dislocated by sudden circumstances, he was slow in re-adjustment. The consequence was, that he often failed in the field, and rarely against an enemy in station, as at Boston and York. He was incapable of fear, meeting personal dangers with the calmest unconcern. Perhaps the strongest feature in his character was prudence, never acting until every circumstance, every consideration, was maturely weighed; refraining if he saw a doubt, but, when once decided, going through with his purpose, whatever obstacles opposed. His integrity was most pure, his justice the most inflexible I have ever known, no motives of interest or consanguinity, of friendship, or hatred, being able to bias his decision. He was, indeed, in every sense of the words, a wise, a good, and a great man. His temper was naturally irritable and high toned; but reflection and resolution had obtained a firm and habitual ascendancy over it. If ever, however, it broke its bonds, he was most tremendous in his wrath.

In his expenses he was honourable, but exact; liberal in contributions to whatever promised utility; but frowning and unyielding on all visionary projects, and all unworthy calls on his charity. His heart was not warm in its affections; but he exactly calculated every man's value, and gave him a solid esteem proportioned to it. His person, you know, was fine, his stature exactly what one would wish, his deportment easy, erect and noble; the best horseman of his age, and the most graceful figure that could be seen on horseback. Although in the circle of his friends, where he might be unreserved with safety, he took a free share in conversation, his colloquial talents were not above mediocrity, possessing neither copiousness of ideas nor fluency of words. In public, when called on for a sudden opinion, he was unready, short and embarrassed. Yet he wrote readily, rather diffusely, in an easy and correct style. This he had acquired by conversation with the world, for his education was merely reading, writing, and common arithmetic, to which he added surveying at a later day. His time was employed in action chiefly, reading little, and that only in agriculture and English history. His correspondence became necessarily extensive, and, with journalising his agricultural proceedings, occupied most of his leisure hours within doors. On the whole, his character was, in its mass, perfect, in nothing bad, in few points indifferent; and it may truly be said, that never did

nature and fortune combine more perfectly to make a man great, and to place him in the same constellation with whatever worthies have merited from man an everlasting remembrance. For his was the singular destiny and merit, of leading the armies of his country successfully through an arduous war, for the establishment of its independence; of conducting its councils through the birth of a government, new in its forms and principles, until it had settled down into a quiet and orderly train; and of scrupulously obeying the laws through the whole of his career, civil and military, of which the history of the world furnishes no other example. . . .

On State Rights

[to william b. giles]

Monticello, December 26, 1825.

I wrote you a letter yesterday, of which you will be free to make what use you please. This will contain matters not intended for the public eye. I see, as you do, and with the deepest affliction, the rapid strides with which the federal branch of our Government is advancing toward the usurpation of all the rights reserved to the states, and the consolidation in itself of all powers, foreign and domestic; and that too, by constructions which, if legitimate, leave no limits to their power. Take together the decisions of the federal court, the doctrines of the President, and the misconstructions of the

constitutional compact acted on by the legislature of the federal branch, and it is but too evident, that the three ruling branches of that department are in combination to strip their colleagues, the state authorities, of the powers reserved by them, and to exercise themselves all functions foreign and domestic. Under the power to regulate commerce, they assume indefinitely that also over agriculture and manufactures, and call it regulation to take the earnings of one of these branches of industry, and that, too, the most depressed, and put them into the pockets of the other, the most flourishing of all. Under the authority to establish post roads, they claim that of cutting down mountains for the construction of roads, of digging canals, and aided by a little sophistry on the words "general welfare," a right to do, not only the acts to effect that, which are specifically enumerated and permitted, but whatsoever they shall think, or pretend will be for the general welfare. And what is our resource for the preservation of the Constitution? Reason and argument? You might as well reason and argue with the marble columns encircling them. The representatives chosen by ourselves? They are joined in the combination, some from incorrect views of government, some from corrupt ones, sufficient voting together to outnumber the sound parts; and with majorities only of one, two, or three, bold enough to go forward in defiance. Are we then

to stand to our arms, with the hot-headed Georgian? No. That must be the last resource, not to be thought of until much longer and greater sufferings. If every infraction of a compact of so many parties is to be resisted at once, as a dissolution of it, none can ever be formed which would last one year. We must have patience and longer endurance then with our brethren while under delusion; give them time for reflection and experience of consequences; keep ourselves in a situation to profit by the chapter of accidents; and separate from our companions only when the sole alternatives left are the dissolution of our Union with them or submission to a government without limitation of powers. Between these two evils, when we must make a choice, there can be no hesitation. But in the meanwhile, the states should be watchful to note every material usurpation on their rights; to denounce them as they occur in the most peremptory terms; to protest against them as wrongs to which our present submission shall be considered, not as acknowledgments or precedents of right, but as a temporary yielding to the lesser evil, until their accumulation shall overweigh that of separation. I would go still further, and give to the federal member, by a regular amendment of the Constitution, a right to make roads and canals of intercommunication between the states, providing sufficiently against corrupt practices in Congress (log-rolling, etc.) by declaring that

the federal proportion of each state of the moneys so employed, shall be in works within the state, or elsewhere with its consent, and with a due salvo of jurisdiction. This is the course which I think safest and best as yet.

As to the Judiciary

[from the autobiography]

[Jefferson recalls the Convention held in 1787, in Philadelphia, for the purpose of drafting the Constitution. He describes how the original proposal of electing the President was amended. He continues:]

But there was another amendment of which none of us thought at the time, and in the omission of which lurks the germ that is to destroy this happy combination of national powers in the General Government for matters of national concern, and independent powers in the states for what concerns the states severally. In England it was a great point gained at the Revolution that the commissions of the judges, which had hitherto been during pleasure, should thenceforth be made during good behaviour. A judiciary dependent on the will of the King had proved itself the most oppressive of all tools in the hands of that magistrate. Nothing then could be more salutary than a change there to the tenure of good behaviour; and the question of good behaviour left to the vote of a simple majority in the two houses of Parliament. Before the Revolution [in America] we were all good English Whigs, cordial in their

free principles, and in their jealousies of their executive magistrate. These jealousies are very apparent in all state constitutions; and in the general government in this instance, we have gone even beyond the English caution, by requiring a vote of two-thirds in one of the Houses for removing a judge; a vote so impossible where any defence is made, before men of ordinary prejudices and passions, that our judges are effectually independent of the nation. But this ought not to be. I would not indeed make them dependent on the executive authority, as they formerly were in England; but I deem it indispensable to the continuance of this government that they should be submitted to some practical and impartial control: and that this, to be imparted, must be compounded of a mixture of state and federal authorities. It is not enough that honest men are appointed judges. All know the influence of interest on the mind of man, and how unconsciously his judgment is warped by that influence. To this bias add that of the *esprit de corps*, of their peculiar maxim and creed that "it is the office of a good judge to enlarge his jurisdiction," and the absence of responsibility, and how can we expect impartial decision between the General Government, of which they are themselves so eminent a part, and an individual state from which they have nothing to hope or fear? We have seen, too, that, contrary to all correct example, they are in the habit of going out of

the question before them, to throw an anchor ahead and grapple further hold for future advances of power. They are then in fact the corps of sappers and miners, steadily working to undermine the independent rights of the states, and to consolidate all power in the hands of that government in which they have so important a freehold estate.

But it is not by the consolidation or concentration of powers, but by their distribution, that good government is effected. Were not this great country already divided into states, that division must [would] be made, that each might do for itself what concerns itself directly, and what it can so much better do than a distant authority. Every state again is divided into counties, each to take care of what lies within its own local bounds; each county again into townships or wards, to manage minuter details; and every ward into farms, to be governed each by its individual proprietor. Were we directed from Washington when to sow and when to reap, we should soon want bread. It is by this partition of cares, descending in gradation from general to particular, that the mass of human affairs may be best managed for the good and prosperity of all. I repeat that I do not charge the judges with wilful and ill-intentioned error; but honest error must be arrested when its toleration leads to public ruin. As for the safety of society, we commit honest maniacs to Bedlam, so judges should be

withdrawn from their bench, whose erroneous biases are leading us to dissolution. It may indeed harm them in fame or fortune; but it saves the republic, which is the first and supreme law.

Counsel to a Grandson

[to thomas jefferson smith]

Monticello, February 21, 1825.

This letter will, to you, be as one from the dead. The writer will be in the grave before you can weigh its counsels. Your affectionate and excellent father has requested that I would address to you something which might possibly have a favourable influence on the course of life you have to run, and I, too, as a namesake, feel an interest in that course. Few words will be necessary, with good dispositions on your part. Adore God. Reverence and cherish your parents. Love your neighbour as yourself, and your country more than yourself. Be just. Be true. Murmur not at the ways of Providence. So shall the life into which you have entered be the portal to one of eternal and ineffable bliss. And if to the dead it is permitted to care for the things of this world, every action of your life will be under my regard. Farewell.

the portrait of a good man by the most sublime of poets, for your imitation

Lord, who 's the happy man that may to Thy
blest courts repair,

Not stranger-like to visit them, but to inhabit there?
'Tis he whose every thought and deed by rules of virtue moves,
Whose generous tongue disdains to speak the thing his heart disproves.
Who never did a slander forge, his neighbour's fame to wound,
Nor hearken to a false report, by malice whispered round.
Who vice, in all its pomp and power, can treat with just neglect;
And piety, though clothed in rags, religiously respect.
Who to his plighted vows and trust has ever firmly stood,
And though he promise to his loss, he makes his promise good.
Whose soul in usury disdains his treasure to employ,
Whom no rewards can ever bribe the guiltless to destroy.
The man, who by this steady course, has happiness insur'd,
When earth's foundations shake, shall stand, by Providence secur'd.

A DECALOGUE OF CANONS FOR OBSERVATION IN PRACTICAL LIFE

1. Never put off till to-morrow what you can do to-day.

2. Never trouble another for what you can do yourself.

3. Never spend your money before you have it.

4. Never buy what you do not want, because it is cheap; it will be dear to you.

5. Pride costs us more than hunger, thirst, and cold.

6. We never repent of having eaten too little.

7. Nothing is troublesome that we do willingly.

8. How much pain have cost us the evils which have never happened.

9. Take things always by their smooth handle.

10. When angry, count ten, before you speak; if very angry, an hundred.

ALEXANDER HAMILTON

The Works of Alexander Hamilton in nine volumes were published by G. P. Putnam's Sons, New York, 1885. Their editor, the Hon. Henry Cabot Lodge, says in the course of his preface.

"Two schools of political thought have existed in the United States, and their struggle for supremacy has made the history of the country. One was the national school, the other was the school of states-rights. One believed in a liberal construction of the constitution, and in a strong and energetic federal government, wielding all its powers to their full extent. The other believed in a strict construction of the constitution, in a simple and restrained federal government, exercising in a limited way only such powers as were absolutely needful. One was founded by Alexander Hamilton, the other by Thomas Jefferson. On the one side it was maintained that the United States ought to be, and were, a nation; on the other, that the Union was a confederacy. The conflict between these opposing forces began at the close of the Revolution, was ardent in the convention which framed the constitution, continued with ever-increasing intensity for seventy years, and then culminated in the civil war. In that fierce battle the national principle, which had strengthened with every year from the time of the formation of the government, triumphed, and it is now supreme.

"The dominant purpose of Hamilton's life was the creation of a national sentiment, and thereby the making of a great and powerful nation from the discordant elements furnished by thirteen jarring states. To the accomplishment of this purpose everything he said and did as a public man was steadily and strongly directed. The influence of the policy of Washington's administration upon the establishment and development of this great nation of ours cannot be overestimated. Much of that policy was due to Hamilton alone, and in all parts of it he made himself deeply felt. Yet his

masterly policy as Secretary of the Treasury, and as cabinet officer, as well as the active and influential part he took in the constitutional conventions, represent but a small part of his services to the cause of nationality. Hamilton's greatest work was in creating, forming and guiding a powerful public opinion in support of a national system, and the sentiment thus brought into being went steadily on with ever-increasing force, until it prevailed over all its enemies. Hamilton achieved his success by the profound influence which he exerted upon the public mind. No statesman in our history has ever swayed so many of the leading men among his contemporaries as Hamilton, and at the same time he appealed by his pen to the largest popular audience of any man of his day. He was the first teacher in the school of national politics. The sacred fire once lighted never went out, and the principles then inculcated were carried forward and ever raised higher through the after years."

From the volumes edited by Mr. Lodge, the following letters have been taken. Mr. Lodge has written a capital Life of Hamilton, published in the American Statesmen series, by Houghton, Mifflin & Co., Boston and New York. — Ed.]

Sketches His Life

[To — Hamilton, a kinsman in Scotland]

Albany, New York, May 2, 1797.

Some days since I received with great pleasure your letter of the 10th of March. The mark it affords of your kind attention, and the particular account it gives me of so many relations in Scotland are extremely gratifying to me. You, no doubt, have understood that my father's affairs at a very early day went to wreck, so as to have rendered his situation during the greatest part of his life far from eligible. This state of things occasioned a separation between

him and me, when I was very young, and threw me upon the bounty of my mother's relatives, some of whom were then wealthy, though by vicissitudes to which human affairs are so liable, they have been since much reduced and broken up. Myself, at about sixteen, came to this country. Having always had a strong propensity to literary pursuits, by a course of study and laborious exertion, I was able, by the age of nineteen, to qualify myself for the degree of Bachelor of Arts in the (Columbia) College of New York, and to lay the foundation by preparatory study for the future profession of the law.

The American Revolution supervened. My principles led me to take part in it; at nineteen, I entered into the American army as captain of artillery. Shortly after I became, by his invitation, aide-de-camp to General Washington, in which station I served until the commencement of that campaign which ended with the siege of York in Virginia, and the capture of Cornwallis's army. The campaign I made at the head of a corps of light infantry, with which I was present at the siege of York, and engaged in some interesting operations.

At the period of peace with Great Britain I found myself a member of Congress, by appointment of the legislature of this state.

After the peace I settled in the city of New York, in the practice of the law, and was in a very lucrative course of practice, when the

derangement of our public affairs, by the feebleness of the general Confederation, drew me again reluctantly into public life. I became a member of the Convention which framed the present constitution of the United States; and having taken part in this measure, I conceived myself to be under an obligation to lend my aid toward putting the machine in some regular motion. Hence, I did not hesitate to accept the offer of President Washington to undertake the office of Secretary of the Treasury.

In that office I met with many intrinsic difficulties, and many artificial ones, proceeding from passions, not very worthy, common to human nature, and which act with peculiar force in republics. The object, however, was effected of establishing public credit and introducing order in the finances.

Public office in this country, has few attractions. The pecuniary emolument is so inconsiderable as to amount to a sacrifice to any man who can employ his time with advantage in any liberal profession. The opportunity of doing good, from the jealousy of power and the spirit of faction, is too small in any station to warrant a long continuance of private sacrifices. The enterprises of party had so far succeeded as materially to weaken the necessary influence and energy of the executive authority, and so far diminish the power of doing good in that department, as greatly to take away the motives which a virtuous man might have for making sacrifices.

The prospect was even bad for gratifying in future the love of fame, if that passion was to be the spring of action.

The union of these motives, with the reflections of prudence in relation to a growing family, determined me as soon as my plan had attained a certain maturity, to withdraw from office. This I did by a resignation about two years since, when I resumed the profession of the law in the city of New York under every advantage I could desire.

It is a pleasant reflection to me that since the commencement of my connection with General Washington to the present time, I have possessed a flattering share of his confidence and friendship.

Having given you a brief sketch of my political career, I proceed to some further family details.

In the year 1780 I married the second daughter of General Schuyler, a gentleman of one of the best families of this country, of large fortune, and no less personal and political consequence. It is impossible to be happier than I am in a wife; and I have five children, four sons and a daughter, the eldest a son somewhat past fifteen, who all promise as well as their years permit, and yield me much satisfaction. Though I have been too much in public life to be wealthy, my situation is extremely comfortable, and leaves me nothing to wish for but a continuance of health. With this blessing, the profits of my profession and other prospects authorise an expectation of such additions to my resources, as will

render the eve of my life easy and agreeable, so far as may depend upon this consideration.

It is now several months since I have heard from my father, who continued at the island of St. Vincent's. My anxiety at this silence would be greater than it is, were it not for the considerable interruption and precariousness of intercourse which is produced by the war.

I have strongly pressed the old gentleman to come and reside with me, which would afford him every enjoyment of which his advanced age is capable; but he has declined it on the ground that the advice of his physicians leads him to fear that the change of climate would be fatal to him. The next thing for me is, in proportion to my means, to endeavour to increase his comforts where he is.

It will give me the greatest pleasure to receive your son Robert at my house in New York, and still more to be of use to him; to which end my recommendation and interest will not be wanting, and I hope not unavailing. It is my intention to embrace the opening which your letter affords me to extend my intercourse with my relations in your country, which will be a new source of satisfaction to me.

A Plea for the Army

[to washington]

Philadelphia, February 7, 1783.

Flattering myself that your knowledge of me will induce you to receive the observations I

make, as dictated by a regard to the public good, I take the liberty to suggest to you my ideas on some matters of delicacy and importance. I view the present juncture as a very interesting one. I need not observe how far the temper and situation of the army make it so. The state of our finances will perhaps never be more critical. I am under injunctions that will not permit me to disclose some facts that would at once demonstrate this position; but I think it probable you will be possessed of them through another channel. It is, however, certain that there has scarcely been a period of the Revolution which called more for wisdom and decision in Congress. Unfortunately for us we are a body not governed by reason or foresight, but by circumstances. It is probable we shall not take the proper measures; and, if we do not, a few months may open an embarrassing scene. This will be the case whether we have peace [with Great Britain] or a continuance of the war.

If the war continues, it would seem that the army must, in June, subsist itself, to defend the country. If peace should take place, it will subsist itself, to procure justice to itself. It appears to be a prevailing opinion in the army that the disposition to recompense their services will cease with the necessity for them, and that, if they once lay down their arms, they part with the means of obtaining justice. It is to be lamented that appearances afford too much ground for their distrust.

It becomes a serious inquiry: What is the true line of policy? The claims of the army urged with moderation, but with firmness, may operate on those weak minds which are influenced by their apprehensions more than by their judgments, so as to produce a concurrence in the measures which the exigencies of affairs demand. They may add weight to the applications of Congress to the several States. So far a useful turn may be given to them. But the difficulty will be to keep a complaining and suffering army within the bounds of moderation.

This your Excellency's influence must effect. In order to do it, it will be advisable not to discountenance their endeavours to procure redress, but rather, by the intervention of confidential and prudent persons, to take the direction of them. This, however, must not appear. It is of moment to the public tranquility, that your Excellency should preserve the confidence of the army without losing that of the people. This will enable you, in case of extremity, to guide the current, and to bring order, perhaps even good, out of confusion. 'T is a part that requires address; but 't is one which your own situation, as well as the welfare of the community, points out.

I will not conceal from your Excellency a truth which it is necessary you should know. An idea is propagated in the army that delicacy, carried to an extreme, prevents your espousing its interests with sufficient warmth. The false-

hood of this opinion no one can be better acquainted with than myself, but it is not the less mischievous for being false. Its tendency is to impair that influence which you may exert with advantage, should any commotions unhappily ensue, to moderate the pretensions of the army, and make their conduct correspond with their duty.

The great desideratum at present is the establishment of general funds, which alone can do justice to the creditors of the United States (of whom the army forms the most meritorious class), restore public credit, and supply the future wants of the Government. This is the object of all men of sense. In this the influence of the army, properly directed may coöperate.

The intimations I have thrown out will suffice to give your Excellency a proper conception of my sentiments. You will judge of their reasonableness or fallacy, but I persuade myself you will do justice to my motives. General Knox has the confidence of the army, and is a man of sense. I think he may safely be made use of. Situated as I am, your Excellency will feel the confidential nature of these observations.

Disruptive Forces Deplored

[to washington]

Philadelphia, March 24, 1783.

Your Excellency will, before this reaches you, have received a letter from the Marquis de

Lafayette, informing you that the preliminaries of peace between all the belligerent powers have been concluded. I congratulate your Excellency on this happy conclusion of your labours. It now only remains to make solid establishments within, to perpetuate our Union, to prevent our being a ball in the hands of European powers, bandied against each other at their pleasure, in fine, to make our independence truly a blessing. This, it is to be lamented, will be an arduous work; for, to borrow a figure from mechanics, the centrifugal is much stronger than the centripetal force in these states — the seeds of disunion much more numerous than those of union.

I will add that your Excellency's exertions are as essential to accomplish this end, as they have been to establish independence. I will upon a future occasion open myself upon this subject.

The Federal Union Must Be Strong

[to washington]

Albany, September 30, 1783.

As I flatter myself I may indulge a consciousness that my services have been of some value to the public, at least enough to merit the small compensation I wish, I will make no apology to your Excellency for conveying, through you, that wish to Congress. You are able to inform them, if they wish information

in what degree I may have been useful; and I have entire confidence that you will do me justice.

In a letter which I wrote to you several months ago, I intimated that it might be in your power to contribute to the establishment of our Federal Union upon a more solid basis. I have never since explained myself. At the time, I was in hopes Congress might have been induced to take decisive ground, to inform their constituents of the imperfections of the present system, and of the impossibility of conducting the public affairs, with honour to themselves and advantage to the community, with powers so disproportionate to their responsibility; and, having done this, in a full and forcible manner, to adjourn the moment the definitive treaty was ratified. In retiring at the same juncture, I wished you, in a solemn manner, to declare to the people your intended retreat from public concerns, your opinion of the present government, and of the absolute necessity for a change.

Before I left Congress I despaired of the first, and your circular-letter to the states had anticipated the last. I trust it will not be without effect, though I am persuaded it would have had more, combined with what I have mentioned. At all events, without compliment, sir, it will do you honour with the sensible and well-meaning; and, ultimately, it is to be hoped, with the people at large.

when the present epidemic frenzy has subsided. . . .

Urging His Acceptance of the Presidency

[to washington]

New York, September, 1788.

. . . I should be deeply pained, my dear sir, if your scruples in regard to a certain station should be matured into a resolution to decline it, though I am neither surprised at their existence, nor can I but agree in opinion that the caution you observe in deferring an ultimate determination is prudent. I have, however, reflected maturely on the subject, and have come to the conclusion (in which I feel no hesitation), that every public and personal consideration will demand from you an acquiescence in what will certainly be the unanimous wish of your country. The absolute retreat which you meditated at the close of the late war was natural and proper. Had the government produced by the Revolution gone on in a tolerable train, it would have been most advisable to have persisted in that retreat. But I am clearly of opinion that the crisis which brought you again into public view left you no alternative but to comply, and I am equally clear in the opinion that you are by that act pledged to take a part in the execution of the government. I am not less convinced that the impression of this necessity of your filling the station in question is so universal, that you run

no risk of any uncandid imputation by submitting to it. But even if this were not the case, a regard to your own reputation, as well as to the public good, calls upon you in the strongest manner to run that risk.

It cannot be considered as a compliment to say that on your acceptance of the office of President the success of the new government in its commencement may materially depend. Your agency and influence will be not less important in preserving it from the future attacks of its enemies than they have been in recommending it in the first instance to the adoption of the people. Independent of all considerations drawn from this source, the point of light in which you stand at home and abroad will make an infinite difference in the respectability with which the government will begin its operations in the alternative of your being or not being at the head of it. I forbear to urge considerations which might have a more personal application. What I have said will suffice for the inferences I mean to draw. . . .

Weakness of the Federal Government

[to washington]

April 10, 1791.

. . . It is to be lamented that our system is such as still to leave the public peace of the Union at the mercy of each state government. This is not only the case as regards direct inter-

ferences, but as it regards the inability of the national government, in many particulars, to take those direct measures for carrying into execution its views and engagements which exigencies require. For example: a party comes from a county in Virginia into Pennsylvania and wantonly murders some friendly Indians. The national government, instead of having power to apprehend murderers and bring them to justice, is obliged to make a representation to that of Pennsylvania; that of Pennsylvania again is to make a representation to that of Virginia. And whether the murderers shall be brought to justice at all, must depend upon the particular policy and energy and good disposition of two state governments and the efficacy of the provisions of their respective laws; and the security of other states, and the money of all, are at the discretion of one. These things require a remedy.

The Art of Putting Things

[TO WASHINGTON]

November 5, 1796.

Yesterday, after the departure of the post, I received your letter of the 3d. I have since seen the answer to Adet [minister from France]. I perceive in it nothing intrinsically exceptionable, but something in the manner a little epigrammatical and sharp. I make this remark freely, because the card now to be played is

perhaps the most delicate that has occurred in our administration, and nations, like individuals, sometimes get into squabbles from the manner more than the matter that passes between them. It is all-important to us — first, if possible, to avoid rupture with France; secondly, if that cannot be, to evince to the people that there has been an unequivocal disposition to avoid it. Our discussions, therefore, ought to be calm, smooth, inclined to the argumentative; when remonstrance and complaint are unavoidable, carrying upon the face of them a reluctance and regret, mingling a steady assertion of our rights and adherence to principle with the language of moderation, and, as long as it can be done, of friendship.

I am the more particular in these observations, because I know that Mr. Pickering, [Secretary of State], who is a very worthy man, has nevertheless something warm and angular in his temper, and will require much a vigilant, moderating eye. . . .

With Regard to a Post in the Army

[to washington]

New York, June 2, 1798.

. . . It is a great satisfaction to me to ascertain what I had anticipated in hope, that you are not determined in an adequate emergency against affording once more your military services. There is no one but yourself that would

unite the public confidence in such an emergency, independent of other considerations, and it is of the last importance that this confidence should be full and complete. As to the wish of the country, it is certain that it will be ardent and universal. You intimate a desire to be informed what would be my part in such an event as to entering into military service, I have no scruple about opening myself to you on this point. If I am invited to a station in which the service I may render may be proportionate to the sacrifice I am to make, I shall be willing to go into the army. If you command, the place in which I should hope to be most useful is that of Inspector-General, with a command in the line. This I would accept. The public must judge for itself as to whom it will employ, but every individual must judge for himself as to the terms on which he will serve, and consequently must estimate his own pretensions. . . .

On Jefferson and Burr

[To oliver wolcott, secretary of the treasury]

New York, December 16, 1800.

It is now, my dear sir, ascertained that Jefferson or Burr will be President, and it seems probable that they will come with equal votes to the House of Representatives. It is also circulated here that, in this event, the Federa-

lists in Congress, or some of them, talk of preferring Burr. I trust New England at least, will not so far lose its head as to fall into this snare. There is no doubt but that, upon every virtuous and prudent calculation, Jefferson is to be preferred. He is by far not so dangerous a man; and he has pretensions to character.

As to Burr, there is nothing in his favour; his private character is not defended by his most partial friends. He is bankrupt beyond redemption, except by the plunder of his country. His public principles have no other spring or aim than his own aggrandisement, right or wrong. If he can, he will certainly disturb our institutions, to secure to himself permanent power, and with it wealth. He is truly the Cataline of America; and if I may credit Major Wilcocks, he has held very vindictive language respecting his opponents.

But early measures must be taken to fix on this point the opinions of the Federalists. Among them, from different motives, Burr will find partisans. If the thing be neglected, he may possibly go far.

Yet it may be well to throw out a lure for him, in order to tempt him to start for the plate, and then lay the foundation of dissension between the two chiefs.

You may communicate this letter to Marshall [then Secretary of State, afterward Chief Justice]

and Sedgwick. Let me hear from you speedily in reply.

Asking a Place for a Chaplain

[to general anthony wayne]

July 6, 1781.

Doctor W. Mendy is one of those characters that for its honesty, simplicity, and helplessness interests my humanity. He is exceedingly anxious to be in the Service, and, I believe, has been forced out of it not altogether by fair play. He is just what I should like for a military parson, except that he does not drink. He will fight, and he will not insist upon your going to heaven whether you will or not. He tells me that there is a vacancy in your brigade. I should be really happy if through your influence, he can fill it. Pray take care of the good old man.

On the Declaration of Peace

[to john laurens]

[Colonel Laurens, at the instance of Hamilton, had been Minister to France. When he returned to America, he brought part of the large subsidy granted by Louis XVI.]

August 15, 1782.

I received with pleasure, my dear Laurens, the letter which you wrote me in —— last. Your wishes in one respect are gratified. This state (New York) has pretty unanimously elected me to Congress. My time of service commences in November. . . . Peace (with

England) on our own terms is upon the carpet. The making it is in good hands. It is said your father is exchanged for Cornwallis, and gone to Paris to meet the other commissioners, and that Granville, on the part of England, has made a second trip there; in the last instance, vested with plenipotentiary powers. I fear there may be obstacles, but I hope they may be surmounted.

Peace made, my dear friend, a new scene opens. The object will then be to make our independence a blessing. To do this we must secure our Union on solid foundations — a herculean task — and to effect which, mountains of prejudice must be levelled! It requires all the virtue and all the ability of the country. Quit your sword, my friend; put on the toga. Come to Congress. We know each other's sentiments; our views are the same. We have fought side by side to make America free; let us hand in hand struggle to make her happy. Yours forever.

A Tactful Bit of Advice

[TO OLIVER WOLCOTT]

April 5, 1797.

I have received your letter of March 31st. I hope nothing in my last was misunderstood. Could it be necessary, I would assure you that no one has a stronger conviction than myself of the purity of the motives which direct your

public conduct, or of the good sense and judgment by which it is guided. If I have a fear (you will excuse my frankness), it is lest the strength of your feelings, the companions of energy of character, should prevent that pliancy to circumstances which is sometimes indispensable. I beg you only to watch yourself on this score, and the public will always find in you an able as well as a faithful servant. . . .

Rules for Mr. Philip Hamilton

[Philip, the eldest son of Alexander Hamilton, was a youth of great promise. In resenting an affront to his father, he was challenged to a duel. He fell, mortally wounded, in his eighteenth year.]

From the first of April to the first of October he is to rise not later than six o'clock; the rest of the year not later than seven. If earlier, he will deserve commendation. Ten will be his hour of going to bed throughout the year.

From the time he is dressed in the morning till nine o'clock (the time for breakfast excepted), he is to read law. At nine he goes to the office, and continues there till dinner time. He will be occupied partly in writing and partly in reading law.

After dinner he reads law at home till five o'clock. From this time till seven he disposes of his time as he pleases. From seven to ten he reads and studies whatever he pleases.

From twelve on Saturday he is at liberty to amuse himself.

On Sunday he will attend the morning church. The rest of the day may be applied to innocent recreations.

He must not depart from any of these rules without my permission.

On the Eve of the Fatal Duel with Burr

[to his wife]

New York, July 10, 1804.

This letter, my dearest Eliza, will not be delivered to you, unless I shall first have terminated my earthly career, to begin, as I humbly hope, from redeeming grace and divine mercy, a happy immortality. If it had been possible for me to have avoided the interview [duel], my love for you and my precious children would have been alone a decisive motive. But it was not possible, without sacrifices which would have rendered me unworthy of your esteem. I need not tell you of the pangs I feel from the idea of quitting you, and exposing you to the anguish I know you would feel. Nor could I dwell on the topic, lest it should unman me. The consolations of religion, my beloved, can alone support you; and these you have a right to enjoy. Fly to the bosom of your God and be comforted. With my last idea I shall cherish the sweet hope of meeting you in a better world. Adieu, best of wives — best of women. Embrace all my darling children for me.

O Captain! My Captain!

O Captain! my Captain! our fearful trip is done,
The ship has weather'd every rack, the prize we sought is won,
The port is near, the bells I hear, the people all exulting,
While follow eyes the steady keel, the vessel grim and daring;
But O heart! heart! heart!
O the bleeding drops of red,
Where on the deck my Captain lies,
Fallen cold and dead.

O Captain! my Captain! rise up and hear the bells;
Rise up—for you the flag is flung—for you the bugle trills,
For you bouquets and ribbon'd wreaths—for you the shores a-crowding,
For you they call, the swaying mass, their eager faces turning;
Here Captain! dear father!
This arm beneath your head!
It is some dream that on the deck,
You've fallen cold and dead.

My Captain does not answer, his lips are pale and still,
My father does not feel my arm, he has no pulse nor will,
The ship is anchor'd safe and sound, its voyage closed and done,
From fearful trip the victor ship comes in with object won;
Exult O shores, and ring O bells!
But I with mournful tread,
Walk the deck my Captain lies,
Fallen cold and dead.

—Written by Walt Whitman after the assassination of Lincoln. Reprinted from "Leaves of Grass," *Authorized Edition, published by Doubleday, Page & Co.*

LINCOLN

[While Washington stands highest in the veneration of the American people, Lincoln is first in their affections. Washington, indeed, was as much the last and best of our kings as the first of our presidents. His elevation of mind, his dignity and reserve, keep him far above the plane of a comrade. But Lincoln was one of ourselves: he was always ready to chat with a neighbour about constitutional reform, and then pass to the attractions of a county fair, or tell a mirthful story. He was one of the plain people: he heartily liked them, they returned the feeling with usury.

As a stripling Lincoln brooded over the tangles of states rights and national supremacy. When he had thought his way through to daylight, he wished that daylight to be shared by his friends. His power to penetrate an involved question to its core, and of persuading others as he himself was persuaded, as ever afterward, went hand in hand. He had a clear eye for elemental truth: that eye had no academic training, it was schooled by a daily struggle for bread, by an unending contact and collision with uncushioned facts, by long sessions of argument which were his main relief from toil. He entered the arena of law, and there quietly strode to the front, gaining the knowledge and experience which overcame Douglas in the famous Debates. That victory carried Lincoln into the White House, just as civil war threatened the nation's life. As President he unfolded his innate genius as a master of events and of men. Meanwhile his faculty of expression, stimulated by supreme crises of feeling, rose from height to height, until at Gettysburg and in his Second Inaugural Address he struck the tones of Isaiah and David. He was as great in heart as in mind. Amid crushing labour and anxiety he had a Christ-like sympathy with suffering and sorrow, a Christ-like forgiveness for unrelenting detraction. His amazing talents, his transparent honesty and homely humour, his tragic martyrdom just as he had led the nation through war to peace, enshrine him in the innermost heart of every American. More than

forty years after his death, soldiers who fought under his standard recall his memory with tears.

Lincoln's secretaries, John G. Nicolay and John Hay, wrote his life, in ten volumes, and a life, in one volume, published by the Century Company, New York. They also edited his writings, issued by the same publishers, in two volumes. An edition of these writings, with additional matter, a full index, a chronology, and a bibliography, is published in twelve volumes by F. D. Tandy & Co., New York. — Ed.]

AUTOBIOGRAPHY

[Written in June, 1860, at the request of a friend, to use in preparing a popular campaign biography for the election of that year.]

ANCESTRY

Abraham Lincoln was born February 12, 1809, then in Hardin, now in the more recently formed county of La Rue, Kentucky. His father, Thomas, and grandfather, Abraham, were born in Rockingham County, Virginia, whither their ancestors had come from Berks County, Pennsylvania. His lineage has been traced no farther back than this. The family were originally Quakers, though in later times they have fallen away from the peculiar habits of that people. The grandfather, Abraham, had four brothers — Isaac, Jacob, John, and Thomas. So far as known, the descendants of Jacob and John are still in Virginia. Isaac went to a place near where Virginia, North Carolina, and Tennessee join; and his descendants are in that region. Thomas came to Kentucky, and after many years died there, whence his descendants went

to Missouri. Abraham, grandfather of the subject of this sketch, came to Kentucky, and was killed by Indians about the year 1784. He left a widow, three sons, and two daughters. . . . Thomas, the youngest son, and father of the present subject, by the early death of his father and very narrow circumstances of his mother, even in childhood was a wandering labouring boy and grew up literally without education. He never did more in the way of writing than to bunglingly write his own name. Before he was grown he passed one year as a hired hand with his uncle Isaac on Watauga, a branch of the Holston River. Getting back into Kentucky, and having reached his twenty-eighth year, he married Nancy Hanks — mother of the present subject — in the year 1806. She also was born in Virginia; and relatives of hers of the name of Hanks, and of other names, now reside in Coles, in Macon, and in Adams counties, Illinois, and also in Iowa. The present subject has no brother or sister of the whole or half blood. He had a sister, older than himself, who was grown and married, but died many years ago, leaving no child; also a brother, younger than himself, who died in infancy. Before leaving Kentucky, he and his sister were sent, for short periods, to A B C schools, the first kept by Zachariah Riney, and the second by Caleb Hazel.

HOMES IN KENTUCKY AND INDIANA

At this time his father resided on Knob Creek, on the road from Bardstown, Kentucky,

to Nashville, Tennessee, at a point three or three and a half miles south or southwest of Atherton's Ferry, on the Rolling Fork. From this place he removed to what is now Spencer County, Indiana, in the autumn of 1816, Abraham then being in his eighth year. This removal was partly on account of slavery, but chiefly on account of the difficulty in land titles in Kentucky. He settled in an unbroken forest, and the clearing away of surplus wood was the great task ahead. Abraham, though very young, was large for his age, and had an axe put into his hands at once; and from that till within his twenty-third year he was almost constantly handling that most useful instrument — less, of course, in ploughing and harvesting seasons.

At this place Abraham took an early start as a hunter, which was never much improved afterward. A few days before the completion of his eighth year, in the absence of his father, a flock of wild turkeys approached the new log cabin, and Abraham with a rifle-gun, standing inside, shot through a crack and killed one of them. He has never since pulled a trigger on any larger game. In the autumn of 1818 his mother died; and a year afterward his father married Mrs. Sally Johnston, at Elizabethtown, Kentucky, a widow with three children of her first marriage. She proved a good and kind mother to Abraham, and is still living in Coles County, Illinois. There were no children of this

second marriage. His father's residence continued at the same place in Indiana till 1830.

SCHOOLING

While here Abraham went to A B C schools by littles, kept successively by Andrew Crawford, — Sweeney, and Azel W. Dorsey. He does not remember any other. The family of Mr. Dorsey now resides in Schuyler County, Illinois. Abraham now thinks that the aggregate of all his schooling did not amount to one year. He was never in a college or academy as a student, and never inside of a college or academy building till since he had a law licence. What he has in the way of education he has picked up. After he was twenty-three and had separated from his father, he studied English grammar — imperfectly, of course, but so as to speak and write as well as he now does. He studied and nearly mastered the six books of Euclid since he was a member of Congress. He regrets his want of education, and does what he can so supply the want.

A TRIP TO NEW ORLEANS

In his tenth year he was kicked by a horse, and apparently killed for a time. When he was nineteen, still residing in Indiana, he made his first trip upon a flatboat to New Orleans. He was a hired hand merely, and he and a son of the owner, without other assistance, made the trip. The nature of part of the "cargo-load," as it was

called, made it necessary for them to linger and trade along the sugar-coast; and one night they were attacked by seven Negroes with intent to kill and rob them. They were hurt some in the melée, but succeeded in driving the Negroes from the boat, and then "cut cable," "weighed anchor," and left.

REMOVAL TO ILLINOIS

March 1, 1830, Abraham having just completed his twenty-first year, his father and family, with the families of the two daughters and sons-in-law of his stepmother, left the old homestead in Indiana and came to Illinois. Their mode of conveyance was waggons drawn by ox-teams, and Abraham drove one of the teams. They reached the county of Macon, and stopped there some time within the same month of March. His father and family settled a new place on the north side of the Sangamon River, at the junction of the timber-land and prairie, about ten miles westerly from Decatur. Here they built a log cabin, into which they removed, and made sufficient of rails to fence ten acres of ground, fenced and broke the ground, and raised a crop of sown corn upon it the same year.

The sons-in-law were temporarily settled in other places in the county. In the autumn all hands were greatly afflicted with ague and fever, to which they had not been used, and by which they were greatly discouraged, so much so that they determined on leaving the county. They

remained, however, through the succeeding winter, which was the winter of the very celebrated "deep snow" of Illinois. During that winter Abraham, together with his stepmother's son, John D. Johnston, and John Hanks, yet residing in Macon County, hired themselves to Denton Offutt to take a flatboat from Beardstown, Illinois, to New Orleans; and for that purpose were to join him — Offutt — at Springfield, Illinois, so soon as the snow should go off. When it did go off, which was about the first of March, 1831, the county was so flooded as to make traveling by land impracticable; to obviate which difficulty they purchased a large canoe, and came down the Sangamon River in it. This is the time and the manner of Abraham's first entrance into Sangamon County. They found Offutt at Springfield, but learned from him that he had failed in getting a boat at Beardstown. This led to their hiring themselves to him for twelve dollars per month each, and getting the timber out of the trees and building a boat at Old Sangamon town on the Sangamon River, seven miles northwest of Springfield, which boat they took to New Orleans, substantially upon the old contract.

A CLERK IN A STORE AND MILL

During this boat-enterprise acquaintance with Offutt, who was previously an entire stranger, he conceived a liking for Abraham, and believing he could turn him to account, he contracted with

him to act as clerk for him, on his return from New Orleans, in charge of a store and mill at New Salem, then in Sangamon, now in Menard County. Hanks had not gone to New Orleans, but having a family, and being likely to be detained from home longer than at first expected, had turned back from St. Louis. . . . Abraham's father, with his own family and others mentioned, had, in pursuance of their intention, removed from Macon to Coles County. John D. Johnston, the stepmother's son, went to them, and Abraham stopped indefinitely and for the first time, as it were, by himself at New Salem, before mentioned. This was in July, 1831. Here he rapidly made acquaintances and friends.

ENLISTS AS A SOLDIER

In less than a year Offutt's business was failing — had almost failed — when the Black Hawk war of 1832 broke out. Abraham joined a volunteer company, and, to his own surprise, was elected captain of it. He says he has not since had any success in life which gave him so much satisfaction. He went to the campaign, served near three months, met the ordinary hardships of such an expedition, but was in no battle. He now owns, in Iowa, the land upon which his own warrants for the service were located. Returning from the campaign, and encouraged by his great popularity among his immediate neighbours, he the same year ran

for the legislature, and was beaten — his own precinct, however, casting its votes 277 for and 7 against him — and that, too, while he was an avowed Clay man, and the precinct the autumn afterward giving a majority of 115 to General Jackson over Mr. Clay. This was the only time Abraham was ever beaten on a direct vote of the people.

KEEPS A STORE

He was now without means and out of business, but was anxious to remain with his friends who had treated him with so much generosity, especially as he had nothing elsewhere to go to. He studied what he should do — thought of learning the blacksmith trade — thought of trying to study law — rather thought he could not succeed at that without a better education. Before long, strangely enough, a man offered to sell, and did sell, to Abraham and another as poor as himself, an old stock of goods, upon credit. They opened as merchants; and he says that was *the* store. Of course they did nothing but get deeper and deeper in debt. He was appointed postmaster at New Salem — the office being too insignificant to make his politics an objection. The store winked out. The surveyor of Sangamon offered to depute to Abraham that portion of his work which was within his part of the county. He accepted, procured a compass and chain, studied Flint and Gibson a little, and went

at it. This procured bread, and kept soul and body together.

ELECTED TO THE ILLINOIS LEGISLATURE

The election of 1834 came, and he was then elected to the legislature by the highest vote cast for any candidate. Major John T. Stuart, then in full practice of the law, was also elected. During the canvass, in a private conversation he encouraged Abraham [to] study law. After the election he borrowed books of Stuart, took them home with him, and went at it in good earnest. He studied with nobody. He still mixed in the surveying to pay board and clothing bills. When the legislature met, the law-books were dropped, but were taken up again at the end of the session. He was reelected in 1836, 1838, and 1840. In the autumn of 1836 he obtained a law licence, and on April 15, 1837, removed to Springfield, and commenced the practice — his old friend Stuart taking him into partnership. March 3, 1837, by a protest entered upon the "Illinois House Journal" of that date, at pages 817 and 818, Abraham, with Dan Stone, another representative of Sangamon, briefly defined his position on the slavery question; and so far as it goes, it was then the same that it is now. The protest is as follows:

"Resolutions upon the subject of domestic slavery having passed both branches of the

General Assembly at its present session, the undersigned hereby protest against the passage of the same.

"They believe that the institution of slavery is founded on both injustice and bad policy, but that the promulgation of Abolition doctrines tends rather to increase than abate its evils.

"They believe that the Congress of the United States has no power under the Constitution to interfere with the institution of slavery in the different states.

"They believe that the Congress of the United States has the power, under the Constitution, to abolish slavery in the District of Columbia, but that the power ought not to be exercised unless at the request of the people of the District.

"The difference between these opinions and those contained in the above resolutions is their reason for entering this protest.

"Dan Stone,
"A. Lincoln,
"Representatives from the
County of Sangamon."

In 1838 and 1840, Mr. Lincoln's party voted for him as Speaker, but being in the minority he was not elected. After 1840 he declined a reelection to the legislature. He was on the Harrison electoral ticket in 1840, and on that of Clay in 1844, and spent much time and labour in

both those canvasses. In November, 1842, he was married to Mary, daughter of Robert S. Todd, of Lexington, Kentucky. They have three living children, all sons, one born in 1843, one in 1850, and one in 1853. They lost one, who was born in 1846.

ELECTED TO CONGRESS

In 1846 he was elected to the lower house of Congress, and served one term only, commencing in December, 1847, and ending with the inauguration of General Taylor, in March, 1849. All the battles of the Mexican war had been fought before Mr. Lincoln took his seat in Congress, but the American army was still in Mexico, and the treaty of peace was not fully and formally ratified till the June afterward. Much has been said of his course in Congress in regard to this war. A careful examination of the "Journal" and "Congressional Globe" shows that he voted for all the supply measures that came up, and for all the measures in any way favourable to the officers, soldiers, and their families, who conducted the war through: with the exception that some of these measures passed without yeas and nays, leaving no record as to how particular men voted. The "Journal" and "Globe" also show him voting that the war was unnecessarily and unconstitutionally begun by the President of the United States. This is the language of Mr. Ashmun's amendment, for which Mr. Lincoln and nearly or

quite all other Whigs of the House of Representatives voted.

HIS VOTES IN CONGRESS EXPLAINED

Mr. Lincoln's reasons for the opinion expressed by this vote were briefly that the President had sent General Taylor into an inhabited part of the country belonging to Mexico, and not to the United States, and thereby had provoked the first act of hostility, in fact the commencement of the war; that the place, being the country bordering on the east bank of the Rio Grande, was inhabited by native Mexicans born there under the Mexican Government, and had never submitted to, nor been conquered by, Texas or the United States, nor transferred to either by treaty; that although Texas claimed the Rio Grande as her boundary, Mexico had never recognised it, and neither Texas nor the United States had ever enforced it; that there was a broad desert between that and the country over which Texas had actual control; that the country where hostilities commenced, having once belonged to Mexico, must remain so until it was somehow legally transferred, which had never been done.

Mr. Lincoln thought the act of sending an armed force among the Mexicans was unnecessary, inasmuch as Mexico was in no way molesting or menacing the United States or the people thereof; and that it was unconstitutional, because the power of levying war is vested in

Congress, and not in the President. He thought the principal motive for the act was to divert public attention from the surrender of "Fifty-four, forty, or fight" to Great Britain, on the Oregon boundary question.

Mr. Lincoln was not a candidate for reëlection. This was determined upon and declared before he went to Washington, in accordance with an understanding among Whig friends, by which Colonel Hardin and Colonel Baker had each previously served a single term in this same district.

In 1848, during his term in Congress, he advocated General Taylor's nomination for the presidency, in opposition to all others, and also took an active part for his election after his nomination, speaking a few times in Maryland, near Washington, several times in Massachusetts, and canvassing quite fully his own district in Illinois, which was followed by a majority in the district of over fifteen hundred for General Taylor.

LAW PRACTICE, SPEECHES AND DEBATES

Upon his return from Congress he went to the practice of the law with greater earnestness than ever before. In 1852 he was upon the Scott electoral ticket, and did something in the way of canvassing, but owing to the hopelessness of the cause in Illinois he did less than in previous presidential canvasses.

In 1854 his profession had almost superseded the thought of politics in his mind, when the

repeal of the Missouri Compromise aroused him as as he had never been before.

In the autumn of that year he took the stump with no broader practical aim or object than to secure, if possible, the reëlection of Hon. Richard Yates to Congress. His speeches at once attracted a more marked attention than they had ever before done. As the canvass proceeded he was drawn to different parts of the State outside of Mr. Yates's district. He did not abandon the law, but gave his attention by turns to that and politics. The state agricultural fair was at Springfield that year, and Douglas was announced to speak there.

In the canvass of 1856 Mr. Lincoln made over fifty speeches, no one of which, so far as he remembers, was put in print. One of them was made at Galena, but Mr. Lincoln has no recollection of any part of it being printed; nor does he remember whether in that speech he said anything about a Supreme Court decision. He may have spoken upon that subject, and some of the newspapers may have reported him as saying what is now ascribed to him; but he thinks he could not have expressed himself as represented.

LOUIS PASTEUR

[“Among the researches that have made the name of Pasteur a household word,” observed Sir William Osler, “three are of the first importance: a knowledge of the true nature of the processes in fermentation—a knowledge of the chief maladies which have scourged man and animals—a knowledge of the measures by which either the body may be protected against these diseases, or the poison neutralised when once within the body. . . . At the middle of the last century we did not know much more of the actual causes of the great scourges of the race, the plagues, the fevers and the pestilences, than did the Greeks. Here comes in Pasteur’s great work. Before him, Egyptian darkness; with his advent a light that brightens more and more as the years give us ever fuller knowledge.”

Louis Pasteur, son of an old soldier of Napoleon’s armies, was born in Dôle, France, in 1822. He died in 1895. His first appointment was as professor of physics in the lycée in Dijon. He rose rapidly until he became professor of chemistry at the Sorbonne, Paris, secretary of the Academy of Sciences and finally director of the famous Pasteur Institute.

A man of amazing industry, energy, and initiative, he was never happy except when working to clear up some mystery of science. From his discoveries of the cures of the silkworm and wine diseases, he gave his attention to such human scourges as anthrax, hydrophobia, and diphtheria. It was he who paved the way to the virtual extermination of a great number of diseases while effectually checking many others. Louis Pasteur was at once the ultra-practical scientist and the most idealistic of high-minded men. Though he fought hard and relentlessly for his theories, he was one of the best beloved of scientists, not only among his devoted followers, but even among the opponents of his scientific theories. The following letters are selected from R. Vallery-Radot’s “Life of Pasteur,” published in 1924 by Doubleday, Page & Co.]

His Early Seriousness

On November 1, 1840—Pasteur not eighteen yet—pleased to hear that his sisters were making some progress in their school work, he wrote the following, which, though slightly pedantic, reveals the warmth of his feelings—“My dear

parents, my sisters, when I received at the same time the two letters that you sent me I thought that something extraordinary had happened, but such was not the case. The second letter you wrote me gave me much pleasure; it tells me that—perhaps for the first time—my sisters have *willed*. To *will* is a great thing, dear sisters, for Action and Work usually follow Will, and almost always Work is accompanied by success. These three things, Will, Work, Success, fill human existence. Will opens the door to success both brilliant and happy; Work passes these doors, and at the end of the journey Success comes to crown one's efforts. And so, my dear sisters, if your resolution is firm, your task, be it what it may, is already begun; you have but to walk forward, it will achieve itself. If perchance you should falter during the journey, a hand would be there to support you. If that should be wanting, God, who alone could take that hand from you, would Himself accomplish its work. . . . May my words be felt and understood by you, dearest sisters. I impress them on your hearts. May they be your guide. Farewell. Your brother."

A Strange Proposal of Marriage

To M. Laurent

February 10, 1848.

Sir:

An offer of the greatest importance to me and to your family is about to be made to you on my behalf; and I feel it my duty to put you in possession

of the following facts, which may have some weight in determining your acceptance or refusal.

My father is a tanner in the small town of Arbois in the Jura, my sisters keep house for him, and assist him with his books, taking the place of my mother whom we had the misfortune to lose in May last.

My family is in easy circumstances, but with no fortune; I do not value what we possess at more than 50,000 francs, and, as for me, I have long ago decided to hand over to my sisters the whole of what should be my share. I have therefore absolutely no fortune. My only means are good health, some courage, and my position in the Université.

I left the École Normale two years ago, an *agrégé* in physical science. I have held a Doctor's degree eighteen months, and I have presented to the Académie a few works which have been very well received, especially the last one, upon which a report was made which I now have the honour to enclose.

This, Sir, is all my present position. As to the future, unless my tastes should completely change, I shall give myself up entirely to chemical research. I hope to return to Paris when I have acquired some reputation through my scientific labours. M. Biot has often told me to think seriously about the Institute; perhaps I may do so in ten or fifteen years' time, and after assiduous work; but this is but a dream, and not the motive which makes me love Science for Science's sake.

My father will himself come to Strasburg to make this proposal of marriage.

Accept, Sir, the assurance of my profound respect, etc.

P. S.—I was twenty-six on December 27.

A definite answer was adjourned for a few weeks. Pasteur, in a letter to Madame Laurent, wrote, "I am afraid that Mlle. Marie may be influenced by early impressions, unfavourable to me. There is nothing in me to attract a young girl's fancy. But my recollections tell me that those who have known me very well have loved me very much."

Of these letters, religiously preserved, fragments like the following have also been obtained. "All that I beg of you, Mademoiselle (he had now been authorised to address himself directly to her) is that you will not judge me too hastily, and therefore misjudge me. Time will show you that below my cold, shy and unpleasing exterior, there is a heart full of affection for you!" In another letter, evidently remorseful at forsaking the laboratory, he says, "I, who did so love my crystals!'

Letters to His Wife

LEIPZIG,
September 18, 1852.

My dear Marie, the very question which has brought me here is surrounded with very great difficulties. . . . I have only studied one tartar thoroughly since I have been here; it comes from Naples and has been refined once. It con-

tains racemic acid, but in such infinitesimal proportions that it can only be detected by the most delicate process. It is only by manufacture on a very large scale that a certain quantity could be prepared. But I must tell you that the first operation undergone by this tartar must have deprived it almost entirely of racemic acid. Fortunately M. Fikentscher is a most enlightened man, he perfectly understands the importance of this acid and he is prepared to follow most minutely the indications that I shall give him in order to obtain this singular substance in quantities such that it can again be easily turned into commercial use. I can already conceive the history of this product. M. Kestner must have had at his disposal in 1820 some Neapolitan tartars, as indeed he said he had, and he must have operated on crude tartar. That is the whole secret. . . . But is it certain that almost the whole of the acid is lost in the first manufacture undergone by tartar? I believe it is. But it must be proved. There are at Trieste and at Venice two tartar refineries of which I have the addresses. I also have letters of introduction. I shall examine there (if I find a laboratory) the residual products, and I shall make minute inquiries respecting the places the tartars used in those two cities come from. Finally, I shall procure a few kilogrammes, which I shall carefully study when I get back to France. . . .

PRAGUE,
October 1, 1852.

Here is a startling piece of news. I arrive in

Prague; I settle down in the Hôtel d'Angleterre, have lunch, and call on M. Rochleder, Professor of Chemistry, so that he may introduce me to the manufacturer. I go to the chemist of the factory, Doctor Rassmann, for whom I had a letter from M. Redtenbacher, his former master. That letter contained all the questions that I usually make to the manufacturers of tartaric acid.

Dr. Rassman hardly took time to read the letter; he saw what it dealt with, and said to me: "I have long obtained racemic acid. The Paris Pharmaceutical Society offered a prize for whoever manufactured it. It is a product of manufacture; I obtain it with the assistance of tartaric acid." I took the chemist's hand affectionately, and made him repeat what he had said. Then I added: "You have made one of the greatest discoveries that it is possible to make in chemistry. Perhaps you do not realise as I do the full importance of it. But allow me to tell you that, with my ideas, I look upon that discovery as impossible. I do not ask for your secret; I shall await the publication of it with the greatest impatience. So that is really true? You take a kilogramme of pure tartaric acid, and with that you make racemic acid?"

"Yes," he said; "but it is still" . . . and as he had some difficulty in expressing himself, I said: "It is still surrounded with great difficulties?"

"Yes, monsieur."

Great heavens! what a discovery! if he had really done what he says! But no; it is impossible.

There is an abyss to cross, and chemistry is yet too young.

Second letter, same date. "M. Rassmann is mistaken. . . . He has never obtained racemic acid with pure tartaric acid. He does what M. Fikentscher and the Viennese manufacturers do, with slight differences, which confirm the general opinion I expressed in my letter to M. Dumas a few days ago."

To J. B. Dumas

February, 1869.

My dear Master:

I thank you for thinking of the poor invalid. I am very much in the same condition as when I left Paris, my progress having been retarded by a fall on my left side. Fortunately, I sustained no fracture, but only bruises, which were naturally painful and very slow to disappear.

There are now no remaining traces of that accident, and I am as I was three weeks ago. The improvement in the movements of the leg and arm appears to have begun again, but with excessive slowness. I am about to have recourse to electricity, under the advice and instructions of Dr. Godélier, by means of a small Ruhmkorff apparatus which he has kindly sent me. My brain is still very weak.

This is how my days are spent: in the morning my three young friends come to see me, and I arrange the day's work. I get up at twelve, after having my breakfast in bed, and having had the

newspaper read to me. If fine, I then spend an hour or two in the little garden of this house. Usually, if I am feeling pretty well, I dictate to my dear wife a page, or more frequently half a page, of a little book I am preparing, and in which I intend to give a short account of the whole of my observations. Before dinner, which I have alone with my wife and my little girl in order to avoid the fatigue of conversation, my young collaborators bring me a report of their work. About seven or half past, I always feel terribly tired and inclined to sleep twelve consecutive hours; but I invariably wake at midnight, not to sleep again until towards morning, when I doze again for an hour or two. What makes me hope for an ultimate cure is the fact that my appetite keeps good, and that those short hours of sleep appear to be sufficient. You see that on the whole I am doing nothing rash, being moreover rigorously watched by my wife and little daughter. The latter pitilessly takes books, pens, papers and pencils away from me with a perseverance which causes me joy and despair.

To M. Duclaux

LYONS,
March, 1871.

My head is full of splendid projects; the war sent my brain to grass, but I now feel ready for further work. Perhaps I am deluding myself; anyhow I will try. . . . Oh! why am I not rich, a millionaire? I would say to you, to Raulin, to Gernez, to Van Tieghem, etc., come, we will trans-

form the world by our discoveries. How fortunate you are to be young and strong! Why can I not begin a new life of study and work! Unhappy France, beloved country, if I could only assist in raising thee from thy disasters!

To His Children

June 2, 1881.

It is only Thursday, and I am already writing to you; it is because a great result is now acquired. A wire from Melun has just announced it. On Tuesday last, 31st May, we inoculated all the sheep, vaccinated and non-vaccinated, with very virulent splenic fever. It is not forty-eight hours ago. Well, the telegram tells me that, when we arrive at two o'clock this afternoon, all the non-vaccinated subjects will be dead; eighteen were already dead this morning, and the others dying. As to the vaccinated ones, they are all well; the telegram ends by the words "*stunning success;*" it is from the veterinary surgeon, M. Rossignol.

It is too early yet for a final judgment; the vaccinated sheep might yet fall ill. But when I write to you on Sunday, if all goes well, it may be taken for granted that they will henceforth preserve their good health, and that the success will indeed have been startling. On Tuesday, we had a foretaste of the final results. On Saturday and Sunday, two sheep had been abstracted from the lot of twenty-five vaccinated sheep, and two from the lot of twenty-five non-vaccinated ones, and inoculated with a very virulent virus. Now, when

on Tuesday all the visitors arrived, amongst whom were M. Tisserand, M. Patinot, the Prefect of Seine et Marne, M. Foucher de Careil, Senator, etc., we found the two unvaccinated sheep dead, and the two others in good health. I then said to one of the veterinary surgeons who were present, "Did I not read in a newspaper, signed by you, *à propos* of the virulent little organism of saliva, 'There! one more microbe; when there are 100 we shall make a cross'?" "It is true," he immediately answered, honestly. "But I am a converted and repentant sinner." "Well," I answered, "allow me to remind you of the words of the Gospel: Joy shall be in heaven over one sinner that repenteth, more than over ninety and nine just persons which need no repentance." Another veterinary surgeon who was present said, "I will bring you another, M. Colin." "You are mistaken," I replied. "M. Colin contradicts for the sake of contradicting, and does not believe because he will not believe. You would have to cure a case of neurosis, and you cannot do that!" Joy reigns in the laboratory and in the house. Rejoice, my dear children.

The World Applauds

On August 3, 1881, Pasteur arrived at St. James's Hall, London, to attend the International Medical Congress. As he was going toward the platform, there was an outburst of applause, hurrahs, and acclamations. Pasteur turned to his two companions, his son and his son-in-law, and said, with a little uneasiness: "It is no doubt

the Prince of Wales arriving; I ought to have come sooner."

"But it is you that they are all cheering," said the President of the Congress, Sir James Paget, with his grave, kindly smile.

A few moments later, the Prince of Wales entered, accompanying his brother-in-law, the German Crown Prince.

In his speech, Sir James Paget said that medical science should aim at three objects: novelty, utility, and charity. The only scientist named was Pasteur; the applause was such that Pasteur, who was sitting behind Sir James Paget, had to rise and bow to the huge assembly.

"I felt very proud," wrote Pasteur to Mme. Pasteur in a letter dated that same day, "I felt inwardly very proud, not for myself—you know how little I care for triumph!—but for my country, in seeing that I was specially distinguished among that immense concourse of foreigners, especially of Germans, who are here in much greater numbers than the French, whose total, however, reaches two hundred and fifty. Jean Baptiste and René were in the Hall; you can imagine their emotion.

"After the meeting, we lunched at Sir James Paget's house; he had the Prussian Crown Prince on his right and the Prince of Wales on his left. Then there was a gathering of about twenty-five or thirty guests in the drawing room. Sir James presented me to the Prince of Wales, to whom I bowed, saying that I was happy to salute a friend to France. 'Yes,' he answered, 'a great friend.'

Sir James Paget had the good taste not to ask me to be presented to the Prince of Prussia; though there is of course room for nothing but courtesy under such circumstances, I could not have brought myself to appear to wish to be presented to him. But he himself came up to me and said, 'M. Pasteur, allow me to introduce myself to you, and to tell you that I had great pleasure in applauding you just now,' adding some more pleasant things."

Pasteur's Heroism

In September, 1881, having heard that yellow fever had just been brought into the Gironde, at the Pauillac lazaretto, by the vessel *Condé* from Senegal, Pasteur immediately started for Bordeaux. He hoped to find the microbe in the blood of the sick or the dead and to succeed in cultivating it. M. Roux hastened to join his master.

If people spoke to Pasteur of the danger of infection, "What does it matter?" he said. "Life in the midst of danger is *the* life, the real life, the life of sacrifice, of example, of fruitfulness."

He was vexed to find his arrival notified in the newspapers; it worried him not to be able to work and to travel *incognito.*

On September 17th, he wrote to Mme. Pasteur: ". . . We rowed out to a great transport ship which is lying in the Pauillac roads, having just arrived. From our boat, we were able to speak to the men of the crew. Their health is good, but they lost seven persons at St. Louis, two passengers and five men of the crew. Save the captain and

one engineer, they are all Senegalese Negroes on that ship. We have been near another large steamboat, and yet another; their health is equally good. . . .

"The most afflicted ship is the *Condé*, which is in quarantine in the Pauillac roads, and near which we have not been able to go. She has lost eighteen persons, either at sea or at the lazaretto. . . ."

No experiment could be attempted—the patients were convalescent. "But," he wrote the next day, "the *Richelieu* will arrive between the 25th and 28th, I think with some passengers. . . . It is more than likely that there will have been deaths during the passage, and patients for the lazaretto. I am therefore awaiting the arrival of that ship with the hope—God forgive a scientist's passion!! —that I may attempt some researches at the Pauillac lazaretto, where I will arrange things in consequence. You may be sure I shall take every precaution. In the meanwhile, what shall I do in Bordeaux?

"I have made the acquaintance of the young librarian of the town library, which is a few doors from the Hôtel Richelieu, in the Avenues of Tourny. The library is opened to me at all hours: I am there even now, alone and very comfortably seated, surrounded with more Littré than I can possibly get through."

A letter to Don Pedro, Emperor of Brazil

The Emperor of Brazil, who took the greatest interest in the doings of the École Normale

laboratory, having written to Pasteur asking when the preventive treatment could be applied to man, Pasteur answered as follows:

September 22, 1884.

SIRE:

Baron Itajuba, the Minister for Brazil, has handed me the letter which Your Majesty has done me the honour of writing on August 21. The Academy welcomed with unanimous sympathy your tribute to the memory of our illustrious colleague, M. Dumas; it will listen with similar pleasure to the words of regret which you desire me to express on the subject of M. Wurtz's premature death.

Your Majesty is kind enough to mention my studies on hydrophobia; they are making good and uninterrupted progress. I consider, however, that it will take me nearly two years more to bring them to a happy issue. . . .

What I want to do is to obtain prophylaxis of rabies *after* bites.

Until now I have not dared to attempt anything on men, in spite of my own confidence in the result and the numerous opportunities afforded to me since my last reading at the Academy of Sciences. I fear too much that a failure might compromise the future, and I want first to accumulate successful cases on animals. Things in that direction are going very well indeed; I already have several examples of dogs made refractory after a rabietic bite. I take two dogs, cause them both to be

bitten by a mad dog; I vaccinate the one and leave the other without any treatment; the latter dies and the first remains perfectly well.

But even when I shall have multiplied examples of the prophylaxis of rabies in dogs, I think my hand will tremble when I go on to Mankind. It is here that the high and powerful initiative of the head of a State might intervene for the good of humanity. If I were a King, an Emperor, or even the President of a Republic, this is how I should exercise my right of pardoning criminals condemned to death. I should invite the counsel of a condemned man, on the eve of the day fixed for his execution, to choose between certain death and an experiment which would consist in several preventive inoculations of rabic virus, in order to make the subject's constitution refractory to rabies. If he survived this experiment—and I am convinced that he would—his life would be saved and his punishment commuted to a lifelong surveillance, as a guarantee towards that society which had condemned him.

All condemned men would accept these conditions, death being their only terror.

HUDSON MAXIM

[Hudson Maxim is in his seventies now. He has by the force of his energy, genius, and indomitable will become one of the outstanding men of his time. The man who, as a boy, braved thistles in order to earn 5 cents a day, later received a check for $205,000 for a single invention. A product of his inventive genius had a great part in winning the war for the Allies. Mr. Maxim, who has been aptly termed "as dynamic as his high explosives," is one of the most picturesque and colourful personalities in the public eye. He is so utterly different from almost any one else, not only in his ideas, but in his whole way of existence, that it is hard to say whether he is more remarkable as a human being than as an inventor. We will let him describe himself in the following pages, which are from "Hudson Maxim—Reminiscences and Comments," as told to and reported by Clifton Johnson, published in 1924 by Doubleday, Page & Co.]

Ancestry and Early Memories

I made the attempt once to trace back my ancestry, for I wanted to see of what sort of folks I was composed, and as I went on delving, I was perfectly amazed at the immense number of my progenitors. You don't have to go back many centuries to discover that you are a blood relation of the majority of the people in your ancestral country. Some of them are noble characters and some are villains. Indeed, all of us are a mixture of nobility and villainy, and whether the nobility that is in a man gets on top and keeps down the

villainy may depend on his having an environment that leaves room in it for him to be decent.

I don't know that any of my ancestors were hung, but some of them were pretty hard customers with their fists. There was one of them who was a great wrestler. Oh! I suppose he must have been as far back as my grandfather's grandfather, and he lived in Massachusetts. Once he went to a fair and threw everybody he wrestled with. His success so elated him that he boasted he could throw the devil himself.

On the way home in the dusk of evening he met a little black man, who said, "I understand that you've been saying you could throw the devil."

"Yes, sir," the champion said.

Then the little black man seized him and threw him as quick as a wink, and my ancestor always insisted afterward that the fellow must have been the devil.

Both of my parents were of English descent. There was, however, a strain of French blood which came down on my father's side, as the name Maxim indicates. Some of the Massachusetts Maxims drifted up into Maine, with a strong inclination to settle where the conquest of the virgin forest was still going on. They were my progenitors. Back as far as I have been able to obtain authentic particulars the Maxims were remarkably powerful physically and unusually long-lived. For instance, my Aunt Eliza Maxim was six feet and two inches tall. When eighteen years old she began working in a woollen mill and walked five miles to her work

and five miles home every day. She lived to be ninety-eight. My grandfather Maxim's mother lived so long she almost never stopped living. When she was a hundred and three years old she ran and jumped over the front-yard fence and went to a neighbour's to make a call.

I was born February 3, 1853, at Orneville, a little town on the border of the wilderness, about equally distant from Bangor to the south and Moosehead Lake to the northwest. In terms of human progress, I was born halfway back to the Stone Age, for during the past seventy years at least one half of all the inventions and developments in the arts and sciences have taken place. No Crœsus and no king, even fifty years ago, was able to travel in a vehicle of such magnificence as the automobile which is now within the means of every moderately well-to-do citizen; and no Crœsus and no king could then possess himself of the comforts and luxuries necessary to mental and physical well-being that are to be found to-day in the common home.

I remember very well that my mother used to make her own candles, and that she often made a rude lamp by filling a small dish with grease, into which she put a wick. An awful lot of bad-smelling smoke came from the lamp, but it served to light the house. That was exactly the light the cave men used.

The region where I spent my boyhood was mostly forest, dotted with a few stray houses along rocky or sometimes sandy trails called roads.

Log houses were still used for dwellings, and I lived in one house, the timbers of which were hewn, not sawed. Shingles were split out of billets of pine with a frow and maul, and after the splitting the thin slices of wood were held in a sort of vise operated by the feet while being smoothed and sharpened with a draw-shave. You know, at that time, Maine was a great lumber country. The people cut wood and sold lumber and worked in sawmills. Incidentally, they raised a little bit of agricultural produce, such as corn and potatoes and apples.

My father was a wood-turner, mill-wright, and miller. He would work in one mill for a while, and then he would move and try his fortune in some other mill. He had a big family of children—very hungry children—and the problem was to get something to eat. If he saw no opportunity of thriving where he was, he went hopefully to another place. When I was ten years old we had moved eleven times, but all our homes, until I was nineteen, were in the vicinity of the Piscataquis River, scattered along a distance of about thirty miles. I don't think Father bettered himself much by his changes. He was just about "as poor as Job's turkey" all the time.

We moved from Orneville when I was very young, and the only definite memory I have of the house which was my birthplace is seeing it after I got to be fifteen or sixteen years of age; and what a mean little measly dwelling it was—a one-story, two-room shack, with no upstairs! In that little

house my parents lived with their six children—Hiram, Lucy, Henry, Leander, Eliza, and myself. Samuel and Frank came later.

It doubtless is true that in the cradle are rocked the destinies of mankind. My parents, however, were too poor to own a cradle in which to rock their infants' destinies. All of us children were rocked in a big wooden bowl. My father was an expert wood-turner, and a big wooden bowl was always available. Mother had him make the bottom nicely rounded so it would rock easy.

Eliza, who was four years older than I, had much to do with taking care of me in my childhood, and the first thing I remember is of being slid down a cellar door, and of hearing my mother caution Eliza that she might hurt the baby. About the same time, I recall walking out into the shed and seeing an old stove red with rust, and wondering why it looked so different from the stove in the kitchen.

His Grandparents an Odd Pair

One day I borrowed Grandfather's sharp axe to chop some wood. I succeeded in cutting my foot pretty badly. When I went back to Grandfather with the axe and told him how I had cut my foot, his only remark was, "Did you dull that axe?"

Yes, Grandfather was a stern old customer. He was a hard driver of a horse, and Grandmother would give him a hot reception when he drove into

the dooryard with the old mare all in a sweat and lather.

My grandmother had a rather severe illness some twenty years after she was married. Although she recovered her bodily vigour, her mind was greatly impaired. She was sane on certain subjects, while on others she was as mad as a March hare.

It was her pet delusion that she was the first cousin of the Prince of Wales, who recently had visited America. She fancied that he had come over to see her, bringing a lot of gold-rimmed dishes, and that some bogeymen, whom she called knaves, had waylaid him and drowned him in a bog a short distance from the house, and had stolen the gold-rimmed dishes. She would go to the door and shout at the top of her voice all manner of maledictions on the knaves who had been guilty of these crimes, and call on us to catch them and "Crush 'em dead!"

Curiously enough, there wasn't much else in which she appeared insane, except her having a sort of hunch that Grandfather was a hypocrite in his religion. The old man was very long at his daily prayers. He had his own ideas of how the universe should be managed, and he didn't hesitate to tell God Almighty what those ideas were. Grandmother had no patience with his prayers, and while he knelt and addressed his petitions to the Deity, she would stand behind him and shake her fists at him and deliver a string of oaths.

Even before the old lady was crazy she used to

make life very interesting for him. Her name was Hannah, and Grandfather composed this verse about her:

> The children of Israel asked for bread,
> And Jehovah sent them manna.
> Levi Stevens asked for a wife.
> And the devil sent him Hannah.

So far as I can recall, my mother never kissed me but twice in all the years of my childhood and youth. Once was when I was a little bit of a boy. She had had a dispute with my older brothers, and while she was putting me to bed that night she kissed me, and said: "When you get to be a big boy, you won't make trouble for your poor old mother—you'll be good to your mother!"

The second time, Sam and I had a quarrel. We were good-sized boys. Probably I was fifteen years old. We had bought some powder and caps for our guns, and we had melted up lead and cast some buckshot in a mould. After loading our guns, we were in the yard ready to go hunting when we got to quarrelling over something or other—I forget what—and Sam threatened to shoot me. Then I went and grabbed the gun away from him and broke the breech of it on a log that lay handy there on the edge of a woodpile. Naturally, he was wild with anger, and he caught up the wreck of his gun, stepped round to the other side of the woodpile, and fired at me. Part of the shot went into the woodpile and part of it went into me. One shot struck me in the shoulder,

one in the groin, and one entered my abdomen and lodged somewhere in my back.

I walked into the house, and my mother undressed me and put me to bed. There was considerable of a rumpus, and Father and Mother and everybody thought that I was mortally wounded. They sent for a doctor who had been an army surgeon in the Civil War. He came and looked me over, pulled a rusty wire out of his pocket—a crooked, bent-up old wire—wiped it on his dirty sleeve, and, with no thought of disinfection or even cleanliness, tried to find the buckshot in my abdomen. He probed in several directions, but didn't succeed in getting in more than half an inch, which saved my life. He gave it up and said I probably would die between twelve and two o'clock that night; but if I wasn't dead by two o'clock, I would get well.

The world looked rather blue to me, and I watched the clock with a good deal of interest. My mother came in and held on to me and kissed me. Father came and asked me if I was afraid to die.

I said: "No, but I want to live like the devil!"

I was pretty sick for a few days. However, the wound healed, and in about a week I was out skating and broke through the ice and swam ashore. The buckshot is still in me.

He Works in a Brickyard

During the summer of 1869 I worked in a brickyard at East Dover. Our hours of labour lasted

from light to dark. That is, we started to work about half-past three in the morning and quit about nine o'clock in the evening, in the longest days of summer. A half-hour interval was allowed for each meal. We had nothing to do on rainy days, and got our wages just the same; so it was supposed that we could afford to put in longer hours in fair weather. But as we didn't have one rainy day all that summer, I didn't profit much by the regulation. I was paid twenty-five dollars a month.

The method of making brick was very primitive. Nevertheless, much the same method is used in Maine yet. The work was so hard we used to have a regular routine of change from one kind of work to another. One day I would wheel clay and sand to the mixer. The next day I would strike brick. The third day I would pile the partially dried brick in loose, high rows to complete the drying. The fourth day I would wheel them to a shed where they were made into a kiln to be burned.

The mixer was run by mule power, and the mule was kept going round and round the machine all day long. He required a good deal of attention to keep him up to duty, and he knew exactly how fast it was his duty to go. When he slowed down and was given a lick with the whip, he would take up the proper pace very spryly, but he couldn't be hurried a bit faster, even if you killed him.

Striking brick was the toughest work I had to do. I'd take a mould which would hold the clay for six bricks, shove it under the delivery of the mixer,

and jump on a treadle with one foot to force the clay into the mould. Then I streaked off the clay level with the top of the mould, seized the mould in both hands, and ran across the brickyard, whirled the mould over and caught it, put it down on the ground bottom up, streaked the clay off that side of the mould, and lifted the mould off the clay forms. Two of us used to work together striking brick, and we would keep it up—run, run, run—hour after hour.

We were encumbered with no clothing except a pair of old breeches with the legs cut off, and held on with a belt or suspender. The work was dirty, and we'd get bedaubed all over with clay and sand. And the work was hot. Gee whiz! if we had dropped from that brickyard into hell on one of those blazing summer days we would have imagined that we had dropped into a refrigerator.

His First Day in New York

My father once said to me that the best safeguard against wrong-doing is right work. At the age of twelve I resolved to make all I could of myself, and to keep at it until I died. I've never swerved from that resolution.

I was able to plough through a great deal of adversity in getting a start in the world, because I inherited from my parents an iron constitution and great physical strength, with energy, ambition, and a creative imagination. Besides, whatever impedes a man, if it doesn't actually stop him, aids his progress. Whatever hits a man

helps him, unless it hits him hard enough to break him or kill him.

There was just once when my course possibly was in danger of being deflected. That was when I was seventeen and Hiram got me to go to work for him in New York. What a great, booming, buzzing confusion New York was to me on first acquaintance! I must have been a rustic-looking figure. I arrived there wearing a checkered flannel shirt with a turndown collar, and I had no necktie. My head-covering was a cap made by my mother, I wore thick boots, and my baggage consisted of a black enamel-cloth valise.

I rode in a horse car from the railroad station downtown, and crossed the Fulton Street Ferry to Brooklyn, where Hiram lived. He had instructed me how to go to his home, and one thing he asked, after I got there, was how much I had been charged for fare on the ferry-boat.

I replied: "They didn't charge me anything"; and when I explained that I walked right in with the wagons he understood. I hadn't seen anybody selling or collecting tickets.

I didn't live with Hiram, but in a boarding house. One evening when I returned to my boarding house after my day's work was done and had gone in and sat down at the dining table, I thought things looked different from usual. I wondered what they'd been doing to the place. Besides, a strange woman was in charge. She came to me and said, "Ain't you boarding in the next house?"

Yes, that was what was the matter. I'd made a

mistake, because the house fronts were just alike.

My first patent was taken out in 1884. It was for a cooker in which I was able to roast and bake by superheated steam. Sometimes it worked very well. At other times the safety valve gave me a great deal of trouble. One day I was sitting alone in the kitchen, steam-roasting a rooster, when, of a sudden, that cooker exploded. The kitchen windows were blown out, the door ripped off its hinges, and the stove demolished.

Fortunately, none of the fragments found me. The oven portion of the cooker, containing the rooster, went upstairs somewhere through the ceiling. Later developments showed that the rooster had gone to bed in the room over the kitchen.

Only a few sample cookers ever were made. Other things took my time and attention.

When the publishing business in which Knowles and I engaged busted up, I was in a condition between hay and grass, as they say in Maine. But soon afterwards Hiram wrote and asked me to hire for him some leading American mechanics to go to England and improve on the English method of gun manufacture. I got the men and went over with them. The Maxim gun interested me greatly and I studied it with all the energy that was in me. It wasn't long before I knew that gun by heart, and I wrote the service manual of it which has since been in general use all over the world. Thus I became interested in explosives and ordnance, the field in which I have worked ever since.

Hiram had acquired fame and wealth, and did

a lot of hobnobbing with the English aristocracy, but my instinct told me that his companions were no better than common folks. I had none of the false veneration so many have, and was not one who worshipped reputation or high position. A king didn't impress me any more than a farmer. You've heard of the young man that the Prince of Wales kicked off the sidewalk, and who bragged about it all the rest of his life. He was very proud of his association with greatness—with royalty. But no association not based on the quality of the man himself appeals to me.

During my stay in England there was great excitement about a wonderful smokeless powder made and kept secret by the French Government. One time, when Hiram was away on business, I was given a few grains of the smokeless powder by a French employee of the gun company, who had got it in Paris. I showed it to my brother on his return, and he was fairly beside himself with delight. He remarked that he wouldn't take ten thousand dollars for those few grains. We examined one of them and by subjecting it to certain tests found out its composition inside of two hours, and in two days we had duplicated and improved it.

In December, I returned to America under a two-year contract with the Maxim-Nordenfelt Guns & Ammunition Company, as their representative to conduct experiments with and to sell Maxim guns to the United States Government. I made my headquarters in Pittsfield, and I hadn't been

in this country long when I got acquainted with the president of the Pneumatic Gun Company. This company had succeeded in selling some of its guns to the Government, but the limitations of the guns were such, and the dangers of handling and shooting the ammunition so great, that the organisation welcomed from me the suggestion that possibly a high explosive could be produced which would be safer.

I thought of a way to accomplish this, but needed some nitroglycerin for my experiments. So I called on old Professor Mowbray, who lived not far from Pittsfield at North Adams. He had made all the nitroglycerin that was used for constructing the Hoosac Tunnel. He told me that probably a little nitroglycerin was left in some old tin cans up on the side of Hoosac Mountain, where his works used to be, but as the works had been abandoned for nearly twenty years, he cautioned me to exercise care in searching for and handling the cans. He sent a young chemist to show me the way. The chemist didn't very much fancy the adventure, because he was afraid of that nitroglycerin.

We borrowed old Mowbray's horse and buggy, and took with us a two-quart bottle containing about a pint of acetone in which to dissolve the nitroglycerin and render it insensitive. When we arrived at the old works, we found them in a state of advanced dilapidation. A lot of apparently empty cans were sitting around on the floor of one room. They were like the ordinary square cans in which varnish is kept, and the vents

had been stopped up with corks, but the corks were out of most of the cans.

We approached the cans cautiously, and didn't kick them or knock them to see if they had anything inside. We lifted them very gingerly and gently, and turned out the contents of such as weren't empty into the bottle of acetone. Most of the roof of the building had fallen in, and some of the cans contained water as well as nitroglycerin, and there were numerous dead flies in the little nitroglycerin that we recovered. But we got altogether about a quart. I held the bottle that contained this in my left hand on our return journey, while I drove the horse with the other hand. I had to make the descent of the mountainside by a rough, old, abandoned road, and the chemist walked at a respectful distance behind.

When I arrived at the room in Pittsfield which I had fixed up and called a laboratory, I strained the flies and dirt out of the nitroglycerin, washed out the acetone, and had some pure nitroglycerin for my experiments. I discovered the secret of making a safe nitrogelatin but later found that Nobel, the great explosives inventor of Europe, had thought the thing out ahead of me.

It is a common experience of inventors to discover that others have anticipated them. It is also a common experience for more than one inventor to think of essentially the same thing and apply for a patent at practically the same time. Evidently, whatever puts into one man's head the idea of inventing something to fill a certain need

is likely to operate on the brain of another man, and often of many others, producing the same results.

I invented a fountain pen, and was planning to make drawings and apply for a patent, but the very next day I saw a man writing with a fountain pen which embodied everything I had thought of.

Becomes Interested in Smokeless Powder

I brought samples of smokeless powder from England, and was the first to introduce it into this country. My experiments with it accomplished revolutionary results, and because of my inventions, I was recalled to England by the Gun Company. I had a conference with the full board of directors, and they agreed to organise an American company, in which I was to have an interest, to make smokeless powder and Maxim guns. I returned to America in about three weeks with my salary doubled. The promised American company was not organised, and the option on my inventions expired.

Again I visited England and entered into a new contract with the Maxim-Nordenfelt Company, and gave them an option of six months to organise an American company to work my inventions, for which they paid me five thousand dollars. But nothing came of the project.

I was paid with a five-thousand-dollar check, and I went to a bank and got it cashed in gold. That was a stupid, childish thing to do. But gold was real money, and I liked the looks of it. So I came

back from the bank with enough English sovereigns to weigh about fifteen pounds. I kept them in the bottom of my trunk on board ship. When I landed I had them in my trousers pocket, and they were almighty heavy to carry.

At my New Jersey factory I developed the first smokeless gunpowder ever submitted to our government for trial, and the first that was adopted, and I was the first to manufacture it in this country. But when my smokeless powder was perfected, and the government tests had been completed, the policy of Congress was so penurious in making an appropriation for it that I was forced to go abroad in the endeavour to sell my European patents. I offered all my inventions to the Maxim-Nordenfelt Company. Negotiations progressed favourably for a time, and then fell through, because the directors got the impression from Hiram that all the essential features of my powder were "cribbed" from him while I was in the employ of that company. In truth, not a single feature of the powder originated with him, and he himself never was able to invent or produce a powder of sufficient merit to compel its use.

I was in England again in 1895 and made a number of inventions there, among which was an automobile. That wasn't profitable. Another unprofitable invention had to do with calcium carbide. My calcium carbide experiments cost me six thousand dollars, and I sold my patents through an agent for two thousand dollars, of

which he got half. I have reason to think that the buyer found the patents very valuable.

The necessity for making a smokeless powder better adapted to cannon engaged the attention of leading chemists, mechanics, and scientific inventors throughout the world. Many of them were backed by limitless government resources, or by vast private capital. I entered the race handicapped by lack of money, and by the dilatory and penurious methods of my own home government, but in the end I won out and distanced all competitors.

My multi-perforated smokeless cannon powder was manufactured in enormous quantities by the Du Pont Company for the Allies during the war. In dollars-and-cents value, more of it was used than of any other single munition, and it had much to do with our winning. The Du Ponts received a single check from the Russian Government for sixty million dollars' worth of it.

Some Narrow Escapes from Death

I've had many narrow escapes in my long experience as an inventor and manufacturer of explosive compounds. Even when the work in such manufacture has been thoroughly systematised there remains considerable danger; and in pioneer inventive experimentation with the materials the risk is much greater, because the experimenter is dealing with unfamiliar compounds and reactions. His pathway is like that of the vedettes of an army passing over a road

planted with enemy mines. The inventor and the soldier get used to danger, but that doesn't lessen the risk. A little absentmindedness on the part of the experimenter, a very slight lack of caution, a seemingly insignificant inadvertence for a moment, may cost a limb, or even a life. The greatest source of danger lies in the tendency for voluntary acts gradually to become automatic. It is this automatic tendency that enables the agile fingers of the stenographer and the pianist to perform freely while leaving the conscious mind to other duties. We all know how we forget whether we have wound a watch or shut a door, and find on investigation that we have done so, but entirely unconsciously.

One of the closest calls I ever had occurred when two of my assistants were helping me weigh out small batches of fulminate of mercury from a ten-pound jar. We placed a little pile of fulminate on each of half-a-dozen or more small squares of glass that lay on a bench where we were working. A five-pound bottle of nitroglycerin was standing on the bench, and there was a fifty-pound case of gelatin dynamite under the bench.

We were proceeding very cautiously, when all at once the scoop on the scales toppled and an iron weight fell, striking within an eighth of an inch of one of the pieces of glass on which was the fulminate of mercury. After a second of suspense, we stared at one another in amazement, wondering whether or not we were still in the land of the living.

An investigation into the cause of the accident revealed that one of the young men employed in the laboratory had broken off an arm of the scales—one of the supports of the scoop—the day before, and, with criminal reticence, had made no mention of the fact to any one. Had that weight fallen on the fulminate it must have dealt death to all of us.

Smokers cause many conflagrations, explosions of fire damp in mines, and the blowing up of powder mills. No smoker and no one carrying matches is ever knowingly admitted to any powder mill or dynamite factory. I acknowledge to having been thoroughly scared on one occasion, when a habitual smoker who was an intimate friend escaped the vigilance of guards and assistants, and entered a building at my experimental works with a lighted cigar in his mouth. On the end of the cigar was an inch of hot ashes and cinders ready to drop off at the least jar. When I caught sight of him, he was bending over a large box containing fifty pounds of dry guncotton, examining the material with his hand. I went up to the smoker and threw a cover over the box. "Please stand back a little," I said, and when my request was obeyed I told him what a risk he had taken. He was so scared he nearly fell to the floor.

Betting on an Explosion

At one time I went into a magazine in which were stored ten carloads of dynamite and thirty-seven thousand pounds of nitroglycerin which I

had made for the Brazilian Government, and found there one of my workmen, named Schultze, knocking a case of dynamite open with a cold chisel and hammer. I discharged him at once.

A short time afterward a neighbouring farmer bought a supply of dynamite from me to use in blowing up stumps, and he said: "I've got an old hand of yours by the name of Schultze working for me. I'm going to let him do this stump job because he knows all about dynamite."

"Schultze!" I said. "He'll blow himself up. He's so careless I had to discharge him."

The farmer seemed unimpressed, and I said to him, "Well, I'll tell you what I'll do. I'll bet you the price of the dynamite that I'm right."

"Agreed!" the farmer said, and drove off.

The next day Schultze ran afoul of an exploding stump, got four of his ribs broken, and was nearly killed. When the farmer and I met afterward, I said: "Well, I win. Schultze blew himself up as I said he would."

The farmer responded: "But I understood you to say that he would kill himself. He isn't more than half killed."

"Well, then," I said, "pay me half price for the dynamite," which he did!

One day, in the year 1894, I had a gold cap put on one of my teeth. In consequence, the tooth ached and kept me awake the greater part of the night. Next morning I rose early and went by train as usual to my New Jersey factory. After I arrived there, I began experimenting with a new

fulminate compound which was one of the most dangerous and deadly explosives known to science. In order to test the dryness of the compound, I took a piece of it about the size of an English penny, broke off a small particle, which I placed on a stand outside the laboratory, lighted a match, and touched that tiny fragment with the flame.

Owing to loss of sleep the night before, my mind wasn't as alert as usual. I had forgotten to lay aside the remaining piece of fulminate, and still held it in my left hand. A spark from the ignited piece entered that hand between my fingers, and the hand was blown off to the wrist. The next thing I saw was the bare end of the wrist bone.

Some time ago I let it be known that I needed a secretary to replace one who was leaving, and applicants came thick and fast. Among these was a hatchet-faced creature with rather a high-strung and nervous temperament, who nevertheless seemed to be so capable that after a careful examination I decided to take her. She, however, hesitated about taking me. She had seen pictures of me in the papers cooking with high explosives and burning nitroglycerin in a lamp to light a room, and she was fearful that she might be blown up.

I assured her that I was now out of the explosive business and that my house was four miles from the dynamite factory where I used to have a laboratory. She finally was persuaded to come, although still somewhat harassed by doubts.

On the evening of her arrival, while she was sitting on one side of the dining-room table and I on

the other, just after we had finished eating, she again raised the question as to whether my home was perfectly safe from explosives. I began telling her how groundless were her fears, when there came a terrific blast, and big fire brands, some of them ten feet long, were blown clear over the house and came down in the lake.

I confess that I was as much surprised as she was. Up I got and rushed out to see what was the matter. Something had happened to my tool house, located about a hundred yards up the hill. A quantity of flashlight powder for use in taking photographs had been stored there, and this had probably been set off by a fire starting in oily rags some of my men had left in a corner. Anyhow, the stuff had gone up with a blast that lighted the whole dome of heaven as bright as day. The excitement was increased by the fact that a lot of rifle cartridges were in the tool house, and these kept exploding, one after another, from the heat. The racket and the flames brought the neighbours running toward the spot, but they didn't dare come close enough to help in putting out the fire while the cartridges continued to explode.

After things had quieted down, I went back to the house and found that my secretary was no longer with us. She had pinned a polite note to the tablecloth, telling where her trunk could be forwarded.

Letter to an Employment Bureau

We have not as yet been suited in a private

secretary. You will remember that Mrs. Maxim and I said that we did not want a private secretary under twenty or over thirty-five, for the reason that a girl under twenty seldom knows anything, and a woman over thirty-five seldom can learn anything.

Well, one evening, three archaic applicants wafted themselves in on us. The first one could not tell a typewriter from a hat rack, while the peculiarities of the terminology of my sesquipedalian verbiage flabbergasted her.

The next applicant was an ethereal creature of the hippopotamus variety. We told her that we wanted somebody a little lighter on her feet than she, as one of the duties of our secretary was to play tennis. She said that although she had never played tennis herself, still it ran in the family, because her grandchildren were expert tennis players. She thought that she could soon get into the gait if we happened to have a derrick handy to accelerate her agility.

When the third antique entered, the thing began to get monotonous, as Mark Twain remarked when a mule had fallen through his tent three times in one evening. I told her that we did not want any one under twenty or over thirty-five. She assured me that she was not under twenty. I told her that I had guessed as much, and asked: "How about the other limit?"

She sharply retorted that she never in her life had touched thirty-five.

"Well," said I, "if that be so, you must have

been skidding some when you went past that numeral."

We do not want the impossible, and we are willing to pay the necessary wages for what we want. If we could get any one as competent and as smart as the private secretary of my New York lawyer, we should be glad to pay twenty dollars a week with all living expenses; and if we could get someone as capable as my wife, we should be mighty glad to pay fifty dollars a week. But, as I have said, we do not expect the impossible. God never made but one woman in Mrs. Maxim's mould, and then He broke the mould. She can spell any word that comes along. She can write 137 words a minute on the typewriter, and she never makes a mistake, even in punctuation.

If you happen to have any one that you think would meet our requirements, we would be glad to have her call.